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To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and improve the character of the service rendered to the public.

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SUBMARINE WORK.

Inventor Lake and his submarine boat Argonaut have returned to Baltimore after an experimental trip of over a thousand miles among the submerged wrecks of the Chesapeake. During the trip the Argonaut traveled under her own power, on the surface, in all kinds of weather and on all sorts of bottoms.

She has crawled, while submerged, over bottoms so soft that the divers would sink into mud above their knees. At another place in Hampton Roads, the currents were strong and the bottom rough. In other places the bottom was composed of loose gravel.

Mr. Lake investigated several wrecks during the trip, of which there are a great many in the Chesapeake Bay, but they are principally coal-laden craft, and of no great value, although with proper equipment, it is said, the coal would pay handsomely for recovery. One vessel boarded had about 2,000 tons of coal and valuable hoisting material.

Mr. Lake hoped to obtain the privilege of going on the bottom at Hampton Roads, and picking up the cable which connects with the mines guarding the entrance, but after spending considerable time in a vain attempt to get the consent of the officers, he laid a cable himself across the channel, and then, submerging his boat, ran across and hauled up the cable in the divers' compartment with a hook about 4½ feet long.

The greatest length of continuous submergence was 10 hours and 10 minutes, five hours of which the machinery was not running, nor was fresh air admitted into the boat. At the end the crew was apparently as fresh as at the beginning.

Meals were cooked with no more inconvenience than on the surface. The trip would have been voted a pleasure ex-

cursion had the boat been large enough to provide sleeping quarters for the crew.

In summing up the result Mr. Lake said: "The trip was sufficient to entirely demonstrate the practicability of submarine boats for going to the bottom of rivers or bays, and also to prove their habitableness and seaworthiness either for surface or under water cruising. The boat also proved its capability for cutting cables, and the present system of protecting entrances to forts must soon become obsolete."

TO BUILD NAVAL VESSELS.

A. W. Murdock, colonial agent in Toronto for the Imperial government, said recently that a syndicate of capitalists of Toronto had been formed for the purpose of developing the iron and nickel industries.

"The idea of it," he said, "is to secure for Canada the building of the new battleships which have been ordered by the Imperial government. I have been in communication with Mr. Chamberlain, the colonial secretary, by cable and he has shown every sympathy with the project. The government will build at least eight new battleships, and I am confident I will secure the construction of four of these for Canada. They will be built near Quebec, where there are immense deposits of iron."

NORTH ATLANTIC PASSENGER RATES.

The North Atlantic Conference rates just fixed are now published on the various companies' bills and handbills. After all the negotiating and the numerous conflicting reports of the work of the conference it is satisfactory to know that arrangements suitable to the steamship lines have been made. The rates agreed upon, which will remain in force for the next two years, are substantially the same as were agreed to between the British and Continental Transatlantic lines two years ago. In fact it will require a certain amount of scrutiny to find where the changes occurred. The whole matter seems to be in the classification of the various types of steamers carrying passengers. It is agreed that the minimum saloon fare chargeable by the fast liners shall be £20 in the summer season, and £15 in the winter.

LAKE LIFE-SAVING STATIONS.

Supt. Kimball, of the life-saving service, has returned to Washington after a tour of inspection of the Michigan life-saving stations, and the stations of other States on the Great Lakes. The superintendent says that the service is in splendid shape in Michigan. Mr. Kimball has selected a site for the station at Charlevoix, and the work of construction will be commenced this fall. The station authorized by Congress at South Manitou Island, will be constructed this fall either at the south point of the harbor or the north point. Mr. Kimball considers the north point more advantageous, and it is likely that this point will be selected.

Supt. Kimball speaks in flattering terms of the services of the late Capt. Robbins. The superintendent says that he will authorize a competitive examination for keepers in the eleventh district to select a successor for Capt. Robbins.

MR. LEWIS NIXON, the well-known engineer and ship-builder of Elizabethport, N. J., has been quoted as saying: "The victory at Santiago will unquestionably increase the shipbuilding output of this country. The achievement of our navy has turned all eyes toward the seas, and capitalists who never thought of looking in that direction, will invest their money in maritime projects and get a liberal return. I believe that the development of the trans-Pacific trade will show surprising results. With the acquisition of Hawaii and the Philippines there is bound to be a big boom on the Pacific. Ships must be built for this traffic, and those ships will be of American construction."

MUTUAL MARINE INSURANCE.

Once again is the talk of organizing a mutual marine insurance association taking hold of some lake vesselmen, though this time it comes from Detroit.

It appears that some attempt has been made to let repairs of what has been abandoned as constructive total losses to the lowest bidder, then to turn the repaired vessel back to the original owners if the repair bill could be flattened down to something less than 50 per cent. the ratio that comes up to a constructive total loss. An owner is quoted as saying:

"It is impossible for a dry dock company to repair a vessel by the job and do it well, if any profit is to be made at all. Suppose the insurance syndicates finally succeed in foisting their peculiar repair methods on the lake interests, and builders fall into the custom of bidding on repair jobs. Of course there will in time be the same keen competition that has for years been the case with the builders of vessels. This will compel the lowest bidders to take jobs at extremely low prices. To make money at these prices, or to come out even, they cannot possibly rebuild the boat in the proper way. A heavily damaged vessel cannot be too strongly repaired. The job cannot be too well done, if the strain to which she has been subjected on the rocks or in collision is to be equalized. And besides this there is her age to be considered. The damage will be all the greater according to her age and general condition. That is why I say every repair job should be first-class, and to guarantee it the repairer should be given carte blanche to put in only the very best material and workmanship. Otherwise the country will be treated to the spectacle of a lot of half-repaired vessels floating about the lakes, ready to leak and founder or go ashore, where they would instead be entirely seaworthy. The owners will then be the losers for the sake of enriching the insurance men who live in London."

Whether there is any reason in the forgoing or not, depends greatly upon the standpoint from which it is viewed, though in any case it is an innovation, and one which does not seem to meet with general approval.

If we take the ground that the underwriter is the most concerned in the vessel's class and that he or they will undertake to keep the vessel up to her rating, then it may be a fairly good thing for the vessel owner to have his property so nursed, that is to say, the vessel is classed by the underwriter when new, and, whatever casualties she may undergo, he or they will undertake all salvage, or, and wrecking operations, besides making temporary or final repairs according to the sworn statement of qualified surveyors and guarantee that the vessel maintains her same class and rating on the books of any universally known and accepted classification society. In such a case it might be found a means of lightening the burden of shipowners or, rather, as there are no ships on the lakes then vessel owner, sail or steam. There are, however, other views to be expressed on this subject, though as we have said, if a vessel owner is satisfied with having his vessel classed by the underwriter who will undertake all wreck, salvage, repair and survey work and can be contented under such a rule, finds his vessel well kept up without the aid of a disinterested or second or third party, then the innovation may be an economy all round.

It is expected that the Erie and Oswego life-saving stations will each be furnished with a thirty-four foot life boat before the close of the present active season. Henry E. Davis, an officer of the instruction department of the government service, is now at Erie superintending the construction of a house for the storage of the new life-boat already assured for that station. The boats to be provided for the two stations will be similar to those now in use at the Buffalo station.

NEWS AROUND THE LAKES.

CHICAGO.

Special Correspondence to The Marine Record.

The steamer Kalkaska is in Miller Bros.' dry dock for a new propeller wheel.

Grain freights are firm this week at 1½ cents on corn, and 1¼ cents on wheat to Buffalo.

The tug A. B. Ward is in the Independent floating dry dock for overhauling and repairs to stern bearing.

The steamer F. W. Fletcher and consorts Nellie Mason and Delaware arrived here Tuesday morning from Duluth and Washburn with loads aggregating nearly 2,000,000 feet of lumber.

William Saville, ship-joiner, has given the steamer Fayette a new stem, 4 new frames, 10 strakes of outside plank, 6 strakes of ceiling, new knight heads, clamp pointers and breast hook, the tug Black Ball new wale strake and a general overhauling.

The largest cargo of coal ever brought into this port was unloaded last week at the O. S. Richardson Co.'s north pier dock, from the steel steamer Andrew Carnegie. The cargo consisted of 5,157 tons of Blackhorse coal. The steamer Progress also unloaded 2,200 tons of coal at the same dock.

The steamer Fayette left here for Sheboygan, Wis., on Saturday, to take on board the menagerie, animals and other equipment of a circus, which is to make a tour of the cities and towns around the shores of Lake Michigan. The steamer McVea accompanied the Fayette with the performers and other members of the circus.

The steamer I. Watson Stephenson with a very large load of lumber and shingles from Marinette arrived here Monday morning. She had a large hole in her stern, the damage extending from the wale strake to the hurricane deck. The damage was occasioned by the Alert, her consort, running into her near the entrance to Sturgeon Bay, on Saturday night. The Alert's bow was crushed in and she sank to her rails.

The Air Line elevator, near the foot of North Market St., was totally destroyed by fire last Saturday night. The fire was discovered about 8:30 p. m., but the united efforts of the fire boats and a large number of fire engines could not control it, although they prevented other buildings in the vicinity from being destroyed. The damage is estimated at \$300,000. For spectacular effects it was pronounced one of the grandest since Chicago's big fire.

The Independent Tug Line's tug Ira O. Smith, caught fire Sunday afternoon about 4 miles outside Chicago harbor. She had two scows in tow, loaded with material from one of the intermediate water-works cribs, which is being demolished. The tugs Ruby and Minnie B. and the crew from the life-saving station went to her assistance, and succeeded in quenching the flames. The damage to the tug by the fire is about \$500.

The new steel barge Maia was successfully launched at the shipyard of the Chicago Ship Building Co. last Saturday afternoon. Her dimensions are 376 feet keel, 390 feet over all, 48 feet beam, 26 feet molded depth. She will be ready for service September 1st, and will join the fleet of the Minnesota Steamship Co., for whom she was built. The Maia was the 33rd steel vessel built by the Chicago Ship Building Co. The whole fleet will carry 150,000 tons on a single trip.

J. J. Rardon & Co. chartered the steamer Gladstone for corn to Buffalo at 1¼ cents, steamer Walter Vail for corn at 1¼ cents and wheat at 1¾ cents to Buffalo, barge Baltic for corn to Erie at 1¾ cents, barge Frank D. Ewen for malt to Buffalo at 1½ cents, steamer Brazil clipped oats to Buffalo at 1½ cents, the steamers Rappahannock and Shenandoah and barges Algeria, Armenia and Grenada for corn to Buffalo at 1½ cents, steamer Britanic for wheat to Buffalo at 1¾ cents.

Jas. A. Calbick & Co. chartered the steamer Toltec and consort Miztec for heavy clipped oats to Buffalo at 1 cent, schooners Cora A and J. H. Mead for heavy clipped oats to Port Huron at 1¼ cents, steamer J. H. Prentice and consort Middlesex clipped oats Milwaukee to Port Huron at 1 cent, consort Halsted for corn Milwaukee to Port Huron at 1 cent, steamer W. P. Ketcham corn to Kingston at 2 cents, consort Geo. B. Owen corn to Kingston at 2¼ cents, steamer J. H. Prentice and consorts Middlesex and Halsted for lumber Duluth to Chicago at \$1.62½, steamer Jim Sherriffs and consort Jas. Mowatt for lumber Ashland to Chicago at \$1.62½, steamer Kalkaska and consorts Aloah and Mediator for lumber Duluth to Chicago at \$1.62½, steamer J. L. Hurd and schooners J. H. Mead, Cora A and Penobscot for lumber Cheboygan, Mich. to Chicago at \$1.00, schooner A. Mosher ties Tawas to Chicago at 5½ cents, steamer Pewaukee for lumber Menominee to Chicago at \$1.00, steamer I. N. Foster for lumber Nahma to Chicago at \$1.00, barge Harry Johnson for lumber Cheboygan to Chicago at \$1.00, schooner James G. Blaine for cedar posts Masonville to Chicago at 2½ cents, schooner Jesse L. Boyce for cedar ties Flat Rock to Chicago at 5 cents, schooner City of Sheboygan for lumber Thompson's Pier to Chicago at \$1.12½, steamer S. O. Neff for lumber Munising to Chicago at \$1.50, steamer Philetus Sawyer for lumber Marquette to Chicago at \$1.50, steamer Normandie for lumber Grand Marais to Chicago at \$1.25, steamer Linden for lumber Ashland to Chicago at \$1.75, steamer Joys for dry lumber Frankfort to Michigan City at \$1.00.

BUFFALO.

Special Correspondence to The Marine Record.

The Moran will drydock for a thorough survey and overhauling on her arrival here.

Excursion boats are as busy as can be these times and have been running for all there is in them.

Capt. Howard Shaw, of Bay City, manager of the Eddy-Shaw fleet visited port this week looking after the interests of his vessels.

While discharging cargo at the Buffalo ore docks the steamer Argonaut commenced to make water and she was towed to the dry dock for searching up.

Capt. John J. Pierson, late mate of the Moran has been given charge of the Portage, of the Union Transit Line. Manager French is evidently aware that good mates make good masters.

The lumber trade at this end of Lake Erie has greatly increased during the past couple of weeks and there is every probability of its continuing so that August will prove a banner month in the lumber industry.

A survey was held this week by Capt. Angus McDougall on the bottom damage of the S. C. Reynolds after grounding in Toledo harbor. The steamer Jewett is also undergoing survey and repairs in dry dock.

James Collins, a deckhand on the steamer Onoko, fell into the hold from the deck to-day as the vessel was lying at the Coatsworth elevator. He was badly bruised, but escaped fatal injury. He was removed to the Emergency hospital.

It is the determination of the Canadian government to have the 14-foot system of navigation between the lakes and the seaboard completed by next summer. The Welland, Cornwall and Lachine canals are ready, but work on the artificial waterways between Prescott and the upper end of the Cornwall canal, and also on the Soulages canal, which will complete the link, is still in progress.

Mr. John Coon, secretary of the Lake Erie Engineering Works, died on Wednesday at his home, 1160 Main street. Mr. Coon was formerly the secretary of the Lake Erie Boiler Works and was known to a large number of lake men who will be sorry to hear of his death. He was always kind and affable to those doing business in the office, and although he had been laid up for several weeks it was not known that his sickness would prove fatal. His age was 53 years.

A well-known figure in marine circles visited Buffalo this week in the person of Mr. Thos. Fitzpatrick, of Cleveland, whose son, John C. Fitzpatrick, is the manager of the Clover Leaf line at this port. From the standpoint of a marine engineer and vessel owner there are few men, if any, with the extended experience possessed by Mr. Thos. Fitzpatrick, and with the ripe judgment of an active and well spent life he makes friends with all whom he comes into contact.

It is now reported that the lake and rail lines are very much in earnest. Each of the interested lines is said to have deposited a forfeit of \$5,000 to observe faithfully the agreement. This guaranty is supposed to have been laid down by each member on his admission to the compact. As a further pledge, each is understood to have bound himself to pay a fine of \$3.00 a ton for all freight carried above his proportion in the divisions of tonnage as made out by the general committee, who have headquarters here.

The large new whaleback Alexander McDougall, Capt. W. H. Kilby, arrived here for the first time on Wednesday. Her dimensions are 430 feet over all, 50 feet beam, and 27 feet depth of hold. Her cargo was 240,000 bushels of corn on 17 feet draft. She carried 6,470 tons on 17 feet 9 inches on her maiden trip. The McDougall could not reach her elevator through the Michigan street draw, and was hauled back to the Pioneer where she will have to lighten. She is a whaleback in all but her bow, and that is of the ordinary type.

Capt. James Stone will probably be installed as supervising inspector of the ninth district about September 1. Capt. M. J. Galvin, the retiring supervisor, returned this week from his final inspection visit of the offices at Oswego, N. Y., and Burlington, Vt., and after his reports are handed in and inventories taken he will be ready to turn over the office to his successor. The ninth district is second only in importance of all the vessel inspection districts of the United States. More vessels are inspected in it than at Boston, Baltimore, New Orleans or San Francisco. The bulk of the work is at Buffalo and Cleveland. The New York City district is the only one exceeding the ninth in the importance and volume of its work.

Mr. John A. Copland, for a decade and a half connected with the Globe, Toronto, has purchased the Harrington Tribune and will take charge on Sept. 1. The Tribune has always been a live, well conducted newspaper looking well after Wellington county's interests and it is likely to advance from every standpoint in its new hands. Mr. Copland is one of the brightest all round newspaper men in the Dominion and will be remembered as the Toronto correspondent of the MARINE RECORD for some years. It of course goes without saying, that many of your readers will wish him every success in his new undertaking, and if diligent attention to business will ensure it, then his ultimate success is already partly accomplished.

Russell & Watson, Main street, have just issued a new catalogue calling attention particularly to the patent fluted lens which they use for all vessels' masthead, sidelights and anchor lamps. The firm has been in business for forty years, and their manufacture has always been noted as the best in the market. A list of U. S. ships and government depart-

mental tonnage is given as being equipped with their excellent lights, and the highest classed lake steamers, such as the twin-screw, exclusively passenger steamers of the Northern line, North West and North Land, are numbered among their list of equipments, as well as the Cleveland and Buffalo passenger steamers. The motto of Russell & Watson is: "Get the best and avoid collisions;" and they do their best to manufacture only the best lamps on the market.

Buffalo vessel interests are getting ready to oppose the proposed abolition of tolls on the Welland canal. They feel that the commercial situation of Buffalo would be injured by such a change, especially in matters connected with the grain trade. The chief benefit would fall to those doing business on Lake Ontario, as they would thereby be enabled to secure a share of the trade of the upper lakes, which is at present held here. It will be rather a curious spectacle though to see one set of vessel owners petitioning the Dominion Government for a cessation of the canal tolls and another set insisting upon the present levy being upheld and continued. If looks from all sides as if the latter would rule as the Welland and St. Lawrence system of canals cost a lot of money and they are owned exclusively by the Dominion which by the way has not a superfluity of revenue to water away.

DETROIT.

Special Correspondence to The Marine Record.

The soldiers of the Eighteenth Pennsylvania, which have been stationed at Fort Brady, Sault Ste. Marie, Mich., will arrive down on the Wednesday D. & C. boat. They are homeward bound and number 316 members.

Richard Common, chief clerk of the Deep Waterways Commission, died here on Tuesday. For sixteen years Mr. Common was chief clerk of the United States Engineer's office at the "Soo." Death was due to consumption. He was only forty-one years of age.

H. C. Burrell, the marine reporter, had another boat stolen from the foot of Woodward avenue this week. He has not yet recovered the one stolen a week ago, although he offered a large reward for its recovery. It now looks as if Mr. Burrell would be compelled to forego his business of marine reporting on Detroit river.

Discussing the report that Capt. Davidson was about to purchase the Wheeler shipyard, James E. Davidson said: "There is absolutely no foundation, to my knowledge, for the statement that my father has made the Wheeler stockholders or bondholders any offer for the plant. He has been approached by many of the stockholders with offers to sell individual stock, but the thought of buying the stock or yard in any way has never been entertained by him."

The owners of the steamer Greyhound will hold a meeting this week to consider the advisability of changing the wheels of the boat from the ones now in use to that of the feathering type. It is expected that the change would materially increase her speed, and as the engine is so completely wrecked, now would be the best time to decide. The work of clearing away the debris of the wrecked engine is progressing, and a more broken up lot of marine machinery would be hard to find.

Considerable difficulty has been experienced all season with regard to the buoys marking Bar Point channel. They have been repeatedly placed in their true position along the channel bank, but they drift away, and as a consequence several vessels have grounded. An effort is being made to induce the Canadian Department of Marine to place black spar buoys along their side of the channel line, those on the American side being red. If the channel were thus marked it is believed that there would be less difficulty.

The steamer Iron Age arrived here on Monday in tow of the tug Wales and placed at the yards of the Detroit Dry Dock Co. The damage is much more serious than was at first supposed, when she broke down off Thunder Bay Island Saturday night. Her bed plate is broken and the machinery damaged to such an extent that an entirely new engine will probably be necessary. This is rather unfortunate at a time when the vessel was likely to earn a little money on a rising freight market after a very dull season but it is one of the chances which vessel owners are obliged to take in their business.

On Tuesday, while the steamer Cuba, of the Merchants' Line, was going down the Detroit River, Second Mate Leopold Bellefeuille was washing down decks. He had on heavy rubber boots and oilers, and while attempting to climb over the rail to kick the cover from one of the scuppers, he fell overboard. A life preserver was thrown to him, but he failed to reach it. A tug was near by and a line was thrown to Bellefeuille, but he did not get hold of it and he sank. Every effort was made to recover the body, but without success. Bellefeuille's home was at Isle Pero, near Montreal. He was about 22 years old.

Capt. James Reid, engaged in wrecking, salvage and wreck raising operations is keeping people guessing about what he is doing with the hull of the foundered steel steamer Cayuga. A short time ago no doubt was expressed but that he would bring her to the surface all right, not in one lift though, but perhaps after half a dozen or more. Now the season is slipping away, September gales will be wafting along pretty soon and Capt. James has not made his initial attempt at raising the hull yet. P'raps he wants to keep a good thing in hand for awhile and intends to yank the wreck a few hundred feet nearer shore or to shoaler water, ready for the finishing stroke early next season. However it is, Capt. Reid, as I said, is keeping folks guessing at his work and intentions.

CLEVELAND.

Special Correspondence to The Marine Record.

The revenue cutter Fessenden arrived here on Sunday afternoon, and will visit other Lake Erie ports inspecting the papers of vessels in harbor.

The steamer George W. Roby, of the Mack line, will make a trip alone while her consort, the W. D. Becker, will have some repairs made at this port.

H. C. Burrell, marine reporter at Detroit, visited the offices of several vessel owners on Wednesday in connection with his marine reporting work on Detroit river.

Capt. John Hall, vessel broker of Buffalo, visited this port on Wednesday. The many friends of Capt. Hall who have not lately had the pleasure of meeting him, will be pleased to learn that he looks and feels as well and hearty as of yore.

Although ore tonnage has been light this week, the rate still remains the same. Grain freights from Duluth are being talked about, and this will no doubt have a tendency to advance ore rates for the balance of the season even if it don't affect coal rates to Lake Superior.

Mr. Thos. Bristow, who has been superintendent of construction at the yards of the Cleveland Ship Building Co. for a number of years past, will retire from the firm on September 15, when, after a well earned rest and vacation, I understand he will go into business on his own account.

It has been decided to send the revenue cutter Onondago to the coast, contrary reports notwithstanding. Orders to cease preparing her for transport through the canals have been rescinded and the work will go ahead as formerly intended before the signing of the Spanish-American protocol.

The tug Wilmot, which is being built at the yards of the Globe Iron Works Co. for a New Orleans firm, will be launched Saturday. This tug and a car ferry are the only vessels now under construction at the yards the two revenue cutters having been accepted by the United States revenue cutter service.

Mr. Robert Logan, constructing engineer and marine expert, left for West Bay City on Wednesday night to finish the construction and equipment of the last Bessemer line boat turned out at that port. Mr. Logan took charge of the three last boats built at the Wheeler yards, and consequently enjoys the distinction of superintending the launching of the largest craft on fresh water.

That an advance will be made soon in ore rates, seems to be the prevailing impression just now among vessel owners. Shippers are holding down like grim death to a dying nigger, but freights will move upward from this on to the close of the season, and p'raps the least tonnage placed ahead the better. Line boats and some of the larger fleets of iron ore carriers will no doubt charter to their last trip, but there is a more favorable outlook for free bottoms in the future.

The Bessemer line says no more boats will be built for them at West Bay City. It is also known that Capt. James Davidson has had a metal shipbuilding yard in contemplation for some time past; the question occurs to some vessel men, is the Wheeler yard suitable for him? Mr. Wheeler had plenty of orders and turned out a number of excellent vessels, yet expenses were found too heavy to keep the business going. It is assured that if Capt. Davidson takes hold of the Wheeler property with his son he is going to make it pay—but will he?

According to the opinion of several men I have asked, there is no probability that the Welland canal tolls will be removed. One reason advanced is that the amount collected just about pays the expenses of working the canal. A reduction of the rates seems to be as much as can be expected, say half rates as a means of doubling the traffic, then the Canadian government would be at no loss as there is not too much work for the canal men to do anyway, or if so, it only comes in spurts. Line boats will kick anyway, and so will the owners of large tonnage, as they can't carry through the canal, so the deal might as well be called off.

While Capt. John McKeigan of the schooner J. J. Barlum was sitting on the rail of his boat, in port at Fairport, a lump of coal fell from the loading machine, striking him on the head and he fell overboard, striking a dock as he fell and breaking his collar bone. One of the sailors dived after him and brought him up. He is suffering from concussion of the brain. He is over sixty years of age and one of the best known masters on the lakes. The owner of the Barlum, Capt. W. C. Richardson, went at once to Fairport and brought Capt. McKeigan to Cleveland, where he can be attended to by his own family, although he was at once taken to the hospital for treatment.

Now that Capt. James Stone has been appointed supervising inspector of steamboats for the Ninth District with former headquarters at Buffalo, it is expected that he will see his way clear, or get others to work for him, so that the office of supervising inspector may be moved to this port. The State of New York has already two or three offices, while Ohio has never been so favored, and it is but just that Capt. Stone should try to get his desk removed from Buffalo to Cleveland during his term of office. The late supervising inspector Capt. M. J. Galvin is a Buffalo man. Capt. Stone has always hailed from Ohio, and in so far as his duties are concerned, it would make no difference whatever if he removed here.

The Cuyahoga, between the Lake Shore railroad bridge and the mouth of the river will probably not be dredged this season, notwithstanding the fact that vessels of heavy draft have grounded there during the last few weeks. The city

has refused to do the necessary dredging to make the stream navigable on the ground that the Federal government has heretofore dredged that section of the river, and yet the government made no appropriation last year for the dredging that should have been done. The United States engineer in charge of the district is powerless in the matter, and if neither the city nor the owners of large tonnage will expend enough money to admit of the largest class of vessels entering the port, then strong representations should be made at Washington with a view to having a portion of the breakwater appropriation diverted to dredging expenses. Or the vessel owners most interested might defray the cost and seek to be re-imbursed from a future appropriation granted for this purpose.

FLOTSAM, JETSAM AND LAGAN.

Two million bushels of wheat are reported to have been taken at Duluth for shipment.

Capt. L. O. Lawson, who has been for twenty-two years chief of the Evanston life-saving crew, will enter the competitive examination for district superintendent recently vacated through the death of Capt. Robbins.

The steamer Nicaragua ran short 150 bushels in her cargo of 80,000 bushels of milling wheat delivered at Milwaukee on Wednesday from Duluth. The grain is to be re-weighed so that the error may be determined, if possible.

The ferry steamer Algolah, owned by the Island Transportation Company, of Mackinaw City, will go to Manitowoc in October for a thorough rebuild at the shipyard of Burger & Burger. She is also to receive a new Scotch-type boiler 12 feet long and 13 feet in diameter, with a guaranteed working steam pressure of 140 pounds, from the Manitowoc Boiler Works.

Capt. Davidson, who is interested in the Bay City Log-towing Company, states that the prospects are good for getting the Canadian prohibitory act against exporting logs set aside. A good deal of work is being done, with every chance of success. An extension of the time of bringing over logs has been granted and the mills are nearly sure of logs enough for next year's cutting anyway.

The combination barge and derrick America, carrying 60 tons of stone and a quantity of cement, sank early on Tuesday morning in the Saginaw river. Two men who slept on the barge barely escaped drowning. Water was a foot deep when they awakened. They swam ashore. The boat will be raised for the sake of the stone, although it is not thought that the hull will be repaired for further work.

The well-known vessel and insurance agency of R. P. Fitzgerald & Co., of Milwaukee, has issued notice of dissolution. The firm is one of the oldest on the lakes, and the members of the firm are vessel owners and men of prominence. Capt. Fitzgerald will hereafter devote his time to the management of his fleet of four steamers, the John Plankington, P. D. Armour, R. P. Fitzgerald and Wiley M. Egan.

On Sunday morning, during smoky weather, the steamer George P. Hope and consort barges J. C. Fitzpatrick and Camden, down-bound from Escanaba with ore, ran on St. Helena shoal in the Straits of Mackinaw. The Hope ran out 10 inches forward and 4 inches aft, but the barges did not go on so heavily. After jettisoning cargo and with brisk, skillful, wrecking work the fleet was successfully floated without very much damage. Credit is due for the prompt and adequate assistance sent the stranded vessels.

The work of finishing up the piers at Superior, Wis., is well under way and will be completed before the bay freezes up in the fall. The pile driving was all done by Whitney Bros. last winter, and at present the cribs are being filled in with stone. There is about \$5,000 worth of carpenter work to be done after the cribs are filled in, and the entire job will cost \$15,000 more before it is in shape to be passed upon by Maj. Sears, Corps of Engineers, U. S. A., in charge of the conservancy and improvements of rivers and harbors on Lake Superior.

The commission of Ogdensburg citizens appointed by the executive committee of the Ogdensburg Board of Trade to represent the commercial interests of their port before the International Commission at Quebec reached that city before the formal opening of the sessions of the conference, on Wednesday. The special matter in which Ogdensburg is interested is securing the abolition of tolls on the Welland canal and St. Lawrence river canals by the Canadian government. It is understood that this is the only matter that will be touched upon by the commission of Ogdensburg citizens before the International Commission.

The harbor tug James A. Quinn, built for the Barry Bros., of Chicago, is said to be the most powerful craft of her size on the lakes. She is 75 feet over all, with 17-foot beam and 11 feet depth of hold. The engines and boilers are unusually large for a tug, and have an indicated horse-power of 630. The boilers are a novelty, and are the first of their kind ever put in use. Large heating surface and unusual steaming powers are claimed for these boilers, which have a heating surface greatly in excess of the ordinary boilers adapted for tug use. The Quinn is in charge of Capt. James Barry.

The struggle between the American line and Richelieu and Ontario company for tourist traffic on the St. Lawrence river has continued unabated. It is said that the two companies are carrying passengers between some of the competitive points at a loss, especially in the Thousand Island region, where a 75 per cent. reduction in passenger rates is in force. A representative of the Richelieu line says that business out of Toronto is large, and his company is doing

an immense local business. American line representatives are also satisfied with the results of the season and say that the rate war has not affected through traffic, and so goes on the merry war of slashing passenger fares.

Norman W. Gifford, of Chicago, began suit in the United States Circuit Court at Grand Rapids on Tuesday against the O'Connor Transportation Co., of Benton Harbor, operating between Benton Harbor and Chicago. The company was formed last May and capitalized for \$15,000, of which \$5,000 was paid in. Gifford shared equally with P. J. O'Connor, Hugh V. O'Connor and Peter J. O'Connor, Jr., all of Chicago, Roscoe D. Farmer, of Benton Harbor. The steamers Lawrence and State of Ohio were chartered to do a passenger and freight business, and Gifford went on a bond, with the other directors, for \$20,000, to secure the payment of the charter money. Gifford alleges gross mismanagement of affairs, and says the company is entirely insolvent. Upon this petition the court made an order appointing Fred A. Hobbs, of Benton Harbor, receiver.

It is wonderful the amount of misinformation that there is given currency to at times. For instance, in nearly all the dailies this week we are told in connection with the transfer of the late Wheeler shipyard at West Bay City to Capt. James Davidson, to be continued as a steel shipbuilding plant, the following: "But Capt. Davidson does not believe that the present plan on which steel boats are built is as safe or perfect as it might be. He has given the subject much consideration and believes that a steel boat to be absolutely safe must be built on the style of a propeller, with an arch running from bow to stern. This, he thinks, would strengthen the boat and obviate the danger of its breaking in two. All steel boats built according to present models are liable to break in two, he believes, if they rest amidships on a rock or bar. In such a case the middle is unable to support the bow and stern. An arched beam would make this impossible and would make the steel boats as strong as the wooden ones." Steel boats to be built in the style of a propeller is superb. I wonder if they would have her twin-bladed, tripled or quadrupled. As the RECORD has often pointed out, a propeller alludes only to the mode of propulsion, whether it is sidewheel, sternwheel or screw. Of course, Capt. Davidson never said anything like he has been so rudely quoted as saying. Capt. Davidson is not the man to entertain any Jules Verne dreams. He is a practical, hard-headed, successful business man and won't attempt to rush afloat any Eiffel tower notions to astonish the shipbuilding world. However, lack of space and common reason forbids us using any more ink on the subject at this time.

DETROIT MARINE POST OFFICE.

LETTERS REMAINING ADVERTISED IN DETROIT, MICH., POST-OFFICE AUGUST 24, 1898.

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Austin W. B., Str. M. Duncan	Loughren Wm.
Briggs Capt. W. Mason	Lockwood James, Str. Folsom
Baxter J. H., Str. Sacramento	Laffrey Ben
Beebe Wm., Str. Globe, 3	Layton Earnest F., Str. Alva
Barrie J. C.	Merrell Henry
Currie Arthur, Str. Gettysburg	Maguire Harry, Str. Orenoco
Conway Daniel, Str. Keystone	Mansfield Frank
Cottrell Geo.	Marcot E. J., Str. Hebard
Cluster Asbury J.	Maxwell R. M., Str. Gettys-
Duncan Vernie	burg, 3
Davison Mrs. I. J.	McCallum Daniel, Str. Alva
Dunlop John	McOmbre Mrs. E. G.
Eastman Mrs. May, Sch.	McNulty J. R., Str. Folsom
Dobbins, 2	McCurran Paul
Enmons Chas. H. Str. Alva	McVica J. M.
Filson D. H.	Pemberton Walter, Str. Toledo
Foley James	Perry Fred E., Str. Colgate
Graves Thomas	Roberts Lorey C., Str. Gettys-
Gilman Daniel, Str. Gettys-	burg
Hillman E. C., Sch. L. A.	Richards Edward
Law, 2	Sawyer John, Str. Toledo
Howe Frank	Smith Roy
Joseph Jessie, Sch. Wadena	Soncrant Earl
Johnson John C., Str. Worth-	Sparich J.
ington	Thodall Peter, Str. I. N. Foster
Knapp B. D.	Wixon J., Str. Wm. Edwards
Low John Wm.	Wenner W. P., Str. Gettysburg
	Wright Albert E.
	F. B. DICKERSON, P. M.

TOTAL RAILROAD MILEAGE.

The total railway mileage in the United States on June 30, 1897, was 184,428.47 miles, there being an increase of 1,651.84 miles, or 0.90 per cent. during the year. In round numbers Alabama shows an increase of 117 miles; Arkansas, 192 miles; California, 219 miles; Louisiana, 161 miles, and Michigan 123 miles. The increase in mileage in the other States and Territories in which an increase occurred was less than 100 miles. In a few States, as usual, a decrease in mileage is shown. The aggregate of railway mileage, including all tracks, on June 30, 1897, was 243,444.41, the increase being 3,315.29 miles. The length of second track was 11,018.47 miles; of third track, 995.79 miles; of fourth track, 780.48 miles. The mileage of yard track and sidings amounted to 46,221.20 miles.

INTERESTING MATTERS ABOUT THE GREAT LAKES.

An interview with Henry C. Barter and Capt. J. M. McGregor, of Detroit, in the International Journal, Cleveland, is as follows:

There has been a very remarkable change in our lake commerce in the last 45 years. I have recollections of lake steamers earlier than this date, because I lived in the little village of Algonac, on the St. Clair river, where there was a coaling station for steamers, kept by the firm of St. Clair & Brooks, as early as 1847. Such steamers as the Ben Franklin, Missouri, Louisiana, Nile, Niagara, Illinois, Garden City, C. P. Griffith and Empire all coaled there at one time or another. These were all side-wheel steamers, and were constructed with a view to the accommodation of passengers, there not being any railway route at that time in the great west.

The growth of the grain trade from the west called into being a fleet of all freight boats, and these were, in the main sailing vessels, and a few of them I well remember would, if on exhibition, attract as much attention as the Santa Maria of Columbus fame. The bark E. B. Morgan was full square-rigged on both her fore and main masts and carried a crew of 12 men, beside a master, two mates, a cook and a royal boy. She could not get over the St. Clair flats with a cargo of 13,000 bushels of wheat without lightering nearly 2,000 bushels. The bark Utica was of the same rig, with the same complement of officers and crew. Her full cargo was about 12,000 bushels of wheat. The brig Oleander, square-rigged on both masts, carried fewer men forward. She carried less than 12,000 bushels of wheat. There were the brigantines Philadelphia, Montezuma and Rio Grande, the topgallant schooners Sallito, Rialto, etc., with crews varying from 8 to 10 men forward, and carrying from 8,000 to 11,000 bushels of wheat.

With a cargo carried each way these vessels made from 7 to 8 trips in a season. The north channel of the St. Clair river was then the only navigable one for deep draft boats, and the depth of water was 10½ feet. And if Jacob Peer is still living he can tell of some of these vessels he has towed out of the St. Clair rapids with an ox team.

My first recollection of a tug was the side-wheel Romeo. A little later came the United, the Telegraph and the Chataqua, side-wheelers. We had no screw-wheel tugs in those days.

There was no night navigation over the St. Clair river flats. Vessels sailed down as far as Algonac and came to anchor and awaited daylight the following day. Vessels also sailed up the Detroit river and through Lake St. Clair to Point Huron, and there awaited daylight. There was a light-house on Point Huron called Belvedere light, which was also the name of a French settlement on Point Huron, at the mouth of the Clinton river. This light-house was abandoned as soon as the first improvements made in the south channel were completed in 1857.

There were many of the vessels in the early fifties, too, which were standing-keel vessels. The centerboard was coming into use, but, like all improvements, the public had to become educated to them. The standing-keel vessel would neither carry as much in proportion to its dimensions or handle as quickly, or with as small a crew. There was no system of towing vessels through the rivers then, consequently they often occupied a week in sailing from Lake Erie to Lake Huron and "vice versa." There were very few light-houses then, and vessels did not navigate the south channel of the Straits of Mackinac, but passed to the northward of Boblo Island, and between Round and Mackinac Island. The light-house on the north side of Boblo Island and the light-ship at Waugoshance were the only lights between Presque Isle harbor and South Manitou Island. Mackinac Island was one known anchorage considered safe in all winds, and St. Helena Island was another, but there was no light-house upon either of them.

The route to the northward of Boblo Island is not used now, except by boats trading from Lake Michigan to Lake Superior. And the Straits are navigated as much at night as during the day.

When we compare the number of sail vessels that would be required to transport 150,000 bushels of wheat from Chicago in 1850, and the number of steam vessels in 1896, we begin to realize the progress we have made. In 1850 it would have required 13 of the largest vessels; to-day it will require but one of a dozen of our largest freight steamers. In 1850 it would have required 25 of our largest vessels to transport 300,000 bushels of oats (the vessels being shoal then, and filling up with wheat nearly as full as with oats). To-day it will require but one. In 1850 it required 390 persons to man the vessels to transport 300,000 bushels of oats, as follows: 25 masters, 50 mates, 25 cooks and 300 men. To-day it requires a crew of 21 persons, as follows: 1 master, 2 mates, 2 engineers, 2 engineers' helpers, 2 wheelmen, 2 lookouts, 2 cooks, and 4 deck hands. In 1850 it would have required five weeks' time to make the round trip from Buffalo to Chicago and return with a cargo each way, while to-day it requires but two weeks. One freight steamer of to-day will deliver two cargoes of coal in Chicago aggregating 10,000 tons, and three cargoes of wheat in Buffalo, aggregating 450,000 bushels, in five weeks, while employing 21 persons on board—officers and men. In 1850 it would have required 25 vessels to deliver 300,000 bushels of wheat and 10,000 tons of coal, and employ 25 masters, 50 mates, 25 cooks and 300 men the same length of time. The rate of freight on wheat in 1850 was 20 cents per bushel; to-day it is less than 2 cents. The rate of wages for a master is somewhat higher. It is higher for mates too; then there are 2 engineers, who are high-priced men. But for all the other men employed on freight steamers to-day the wages are not

higher than the wages paid to each 12 men in 1850. In other words, common wages are not any higher to-day on the lakes than they were in 1850. The hours are longer and the work much more laborious now than then.

NOTICE TO MARINERS.

LIGHT-HOUSE ESTABLISHMENT,
OFFICE OF THE LIGHT-HOUSE INSPECTOR, 10TH DISTRICT,
BUFFALO, N. Y., Aug 23, 1898.

The Limekiln Crossing south light-vessel will be withdrawn from her station in the Detroit river about August 29th for repairs.

During her absence, which will be for a period of about two weeks, a temporary light will be shown from a lantern on a float moored in the position usually occupied by the light-vessel.

By order of the Light-House Board,
FRANKLIN HANFORD,
Inspector 10th L. H. District. Commander U. S. N.

UNITED STATES OF AMERICA—NORTHERN LAKES AND RIVERS—MICHIGAN.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
WASHINGTON, D. C., Aug. 15, 1898.

SEUL CHOIX POINTE LIGHT-STATION.—Notice is hereby given that, on or about August 25, 1898, the color of the tower of this station, on the easterly extremity of Seul Choix Pointe, northerly end of Lake Michigan, will be changed from red to white.

No changes will be made in color of dwelling, covered way, or fog signal house.

By order of the Light-House Board:
RUSH R. WALLACE,
Commodore, U. S. Navy, Chairman.

SUN'S AMPLITUDES.

The following approximate amplitudes of the Sun's rising will be given each week in this column during the season of navigation. A second bearing may be taken by compass at sunset by reversing the east bearings given for the nearest latitude, as the change in declination for a few hours makes but a slight difference in the true bearing of the Sun's setting:

LAKE ERIE AND S. END LAKE MICHIGAN, LAT. 42° N.		
Sunrise.	Bearing.	Bearing.
August 27.....	E. 13° N.	E. by N. ¼ N.
August 30.....	E. 12° N.	E. by N. ½ N.

LAKE ONTARIO, S. END HURON AND CENTRAL PORTION LAKE MICHIGAN, LAT. 44° N.		
Sunrise.	Bearing.	Bearing.
August 27.....	E. 14° N.	E. by N. ¼ N.
August 30.....	E. 12° N.	E. by N. ½ N.

N. END LAKES HURON AND MICHIGAN, LAT. 46° N.		
Sunrise.	Bearing.	Bearing.
August 27.....	E. 14° N.	E. by N. ¼ N.
August 30.....	E. 13° N.	E. by N. ½ N.

LAKE SUPERIOR, LAT. 48° N.		
Sunrise.	Bearing.	Bearing.
August 27.....	E. 15° N.	E. by N. ¾ N.
August 30.....	E. 13° N.	E. by N. ¼ N.

With a compass correct magnetic, the difference between the observed and true bearing or amplitude will be the variation for the locality. Should there be any deviation on the course the vessel is heading at the time of taking the bearing, the difference between the observed and the true amplitude after the variation is applied, will be the amount of deviation on that course. If the correct magnetic bearing is to the right of the compass bearing, the deviation is easterly, if to the left, the deviation is westerly.

"AVE A CAB SIR!"

The tales of the panic on board the sinking Bourgogne make me think of a story ex-Congressman Ben Cable, of Rock Island, tells of an experience of his in midocean, says a writer in the Washington Post. The day was foggy, and most of the passengers were below listening to two evangelists who were holding a particularly fervid gospel meeting in the saloon. Sudden and without the slightest warning there was a terrific crash and the engines stopped. Every one rushed on deck. The steamer had run into an iceberg. Nobody knew what damage had been done, and everybody was ready to fly into a panic. The boats were lowered and then for the first time the two evangelists, who had been forgotten in the saloon appeared on deck.

They wore their overcoats and their hats and they carried rugs and handbags. They elbowed their way rudely to the rail, with the evident intent of securing for themselves first places in the boat. It was just at a time when a breath would have sent the passengers panic stricken into the boats. The sight of the two evangelists was about to undo the work of cool-headed officers, when a pert little cockney stepped up to the gentlemen with the rugs and handbags.

"Beg pardon," said, he tipping his cap, "ave a cab sir!" And in the general laugh the danger of panic was averted.

THE RAINFALL AND OUTFLOW OF THE GREAT LAKES.

On pages 164-166 of the Monthly Weather Review for April, 1898, the editor has computed, for each of the Great Lakes, respectively, the available surplus of water, viz, the inflow from the upper lake, the direct rainfall plus the run off from the surrounding watershed less the annual evaporation, and has shown that the computed surplus decidedly exceeds the measured outflow. The excess is so large that it argues a corresponding uncertainty in all the data entering into the computation and fully confirms the conclusion expressed in the first report of the United States Deep Waterways Commission, viz, that every effort must be made to obtain better and more reliable data. To this end, in fact, the present United States Board of Engineers on deep waterways has been organized, and the following extracts from letters of G. Y. Wisner, C. E., a member of this board, show the present condition of our knowledge of the subject:

LAKE ERIE.—The discharge into Niagara river for mean lake level will probably prove to be about 235,000 or 240,000 cubic feet per second (instead of 250,000, adopted on page 164.)

LAKE SUPERIOR.—The outflow, namely, the discharge through St. Marys river, was determined in 1895, by Mr. Haskell, as 72,600 cubic feet per second for mean lake level, instead of the 86,000 formerly adopted.

LAKE MICHIGAN PLUS HURON.—The discharge of the St. Clair river will probably be diminished proportionately, viz, about 10 or 12 per cent., reducing it from 225,000 to 200,000.

LAKE ST. CLAIR.—The discharge of Lake St. Clair, through Detroit river, will fall below 200,000 cubic feet per second for mean condition.

As regards the run off for Lake Superior, a fair estimate for the water-shed is 40 per cent, as the country surrounding the lake is very rolling and rocky. For Lakes Michigan, Huron, and Erie, 33 per cent. is about right.

Adopting these values we have the following results:

LAKE SUPERIOR.—Total supply 4.2 feet, total discharge 2.6 feet, leaving 1.6 foot for evaporation and errors in the estimates.

LAKE HURON PLUS LAKE MICHIGAN.—Total supply 6.6 feet, total discharge 5.0 feet, leaving 1.6 foot for evaporation and errors in the estimates.

LAKE ST. CLAIR PLUS LAKE ERIE.—Total supply 27.8 feet, total discharge 25.5 feet (adopting 235,000 feet per second), leaving 2.3 feet for evaporation and errors in the estimates. Discharge for Lake Huron is probably less than 200,000, which would increase this excess by 20 per cent. above the estimate for Lake Huron and decrease that for Lake Erie.

Nothing more definite can be hoped for until the final report of the engineers who are now at work on the physics of the lakes and waterways.

Evaporation is the most uncertain element in the solution of this problem, due to the fact that evaporation as determined at observation stations, in no way represents the true conditions on the lake surfaces during windy weather. The lake surface is increased to a considerable extent by wave action and the contact with constantly changing air and spray blown from waves make conditions which almost render the problem indeterminate.

Mr. Wisner adds:

The run off above given is that which, from a personal knowledge of the country, seems reasonable to me. The discharge of the St. Marys, 72,600, is, I think, very nearly correct. The discharge of the St. Clair river for mean conditions does not, in my opinion, exceed 200,000 cubic feet per second. In this connection I wish to call attention to the fact that the discharge of Lake Huron depends on both the stage in Lake Huron and in Lake St. Clair. Owing to the fluctuation of Lake Erie being greater than for Lake Huron, the minimum slope of the St. Clair river occurs at the high stage of the lakes, and the maximum slope at the minimum stage, a condition which has not been heretofore considered, and which plays an important part in the fluctuations of both lakes. The St. Clair river is only 750 feet wide at its head, and a large part of any change of slope is concentrated in the rapid at the foot of Lake Huron, which simply means that the maximum discharge is not necessarily at the maximum stage of Lake Huron.

We are now making additional observations for the discharge of Niagara river at a higher stage than when observations were made last fall, which may change the result obtained then.

I feel quite confident now that the discharge for mean stage will likely fall between 230,000 and 240,000 cubic feet.

"SOO" CANAL FRANCHISE.

The Sault Ste. Marie council has passed an ordinance granting to E. V. Douglas, of Philadelphia, an important franchise, desired in connection with the development of the "Soo's" big waterpower canal. It is announced that the company, which Mr. Douglas represents, is now ready to proceed with the work, proposals for the construction of which were received last month. An expenditure of over \$2,000,000 is involved. Forty thousand horse-power, half of which has been contracted for already, will be developed.

MARITIME LAW.

THE KANSAS.

BUTLER ET AL. VS. THE KANSAS.

District Court, D. Massachusetts, May 10, 1898.

CARRIERS BY SEA—BILL OF LADING—LOSS OF GOODS— In a bill of lading for old metal, a provision that if the goods be prevented, "by any cause," from going by the steamer specified, the carrier may forward them by the succeeding steamer of his line, warrants him in leaving them for the next vessel, which sails four days later, when the space reserved for the goods is needed for more perishable articles. And his failure to notify the shipper that they are so left does not make either him or the vessel liable for their loss in transit by a peril of the sea, though the shipper procures insurance on the goods only by the vessel specified, whereby he is unable to recover on the policy.

This was a libel in rem by Thomas Butler and others against the steamship *Kansas*, to recover for the loss of goods shipped.

Brown, district judge. This is a libel in rem to establish a maritime lien upon the steamship *Kansas* for failure to deliver at Liverpool thirty-two barrels of old metal. The *Kansas* is one of the Warren line of steamships (so called), running between Boston and Liverpool, and was advertised to sail, and did sail, from Boston, January 26, 1897.

Warren & Co. were agents for a number of steamships known as the Warren line. In this line, besides the *Kansas*, owned by the claimant, the *Kansas Steamship Co., Limited*, a British corporation, was the *Angloman*, a steamship owned by the British & North Atlantic Steam Navigation Co. The *Angloman* sailed January 30, 1897, four days after the *Kansas*, and was the next succeeding steamship of the Warren line. The metal was received on the dock January 22. A short time before the *Kansas* sailed it was found that, after stowing the rest of the cargo, there was no room on the *Kansas* for the metal. It appeared in evidence that freight of this character is customarily loaded last. The loading of the various vessels was in charge of Warren & Co.'s superintendent, and not of the masters of the vessels. The merchandise was shipped upon the *Angloman*, and was totally lost, through perils of the sea, when the vessel was wrecked on the coast of Wales on or about the 10th day of February, 1897. The libelants insured their cargo on the *Kansas* on January 23, for \$2,500, and had no insurance by any other ship. January 25 a draft was drawn on their consignees; and the draft, with insurance policy and bill of lading attached, was discounted by Kidder, Peabody & Co., of Boston, and sent forward for collection. In consequence of the loss of the *Angloman*, the draft was unpaid, and was protested. The insurance company refused payment, as they had insured by the *Kansas* only. The libelants were not personally informed that the goods had not gone on the *Kansas* until after the loss of the *Angloman*. The libelants seek to recover the value of the merchandise lost, with the expenses of protest of their draft.

The libelants contend that the bill of lading was a positive engagement that the goods should go by the *Kansas*, that they were in the custody of the ship *Kansas*, and that there has been a breach of contract in the failure to put the goods on the *Kansas*, and deliver them by her at Liverpool. It seems clear, however, that the shipping of the goods upon the *Angloman* instead of upon the *Kansas* was, under the circumstances, in accordance with the express provisions of the contract, and not contrary thereto. The condition of a right to ship on a succeeding vessel was that the goods should be "prevented by any cause from going in the said steamship." Conceding that this right should not be exercised arbitrarily, and that the cause must be reasonable, yet as another vessel was to depart within the brief period of four days, and as there was, so far as appears, no reason to believe at the time that the transportation upon the second vessel would not as well fulfill the purpose of the shipper of these goods, which could not deteriorate by delay, I find, upon the evidence, that the right was reasonably exercised. It is obviously difficult for those in charge of a freighting line, whose vessels carry mixed cargoes, to foresee with exactness the amount of freight that will arrive, or the precise manner of stowing it. In this case the usual place of stowage for articles of this character was reserved until a short time before the *Kansas* sailed. There were other articles, more or less perishable in character—bacon, apples, cheese, cattle and sheep—naturally entitled to preference, and the metal was left out because the ship was loaded to her limit. A contract which provides for such contingencies as arise in the ordinary course of business is not unreasonable, and should receive a construction that gives it effect. The contract must be considered, therefore, not as an absolute engagement to send the goods on the *Kansas*, but as giving a right to send them on a later vessel if reasons of the charac-

ter existing in the present case should arise. This conclusion would follow whether the contract were held to be with the Warren line, so called, or with the owner of the *Kansas*. I am of the opinion, therefore, that there is no liability attaching either to the vessel or to the owner for failure to deliver the goods.

The libelant claims, however, that in reliance upon the bill of lading he insured the goods only by the *Kansas*, that it was the carrier's duty to notify him of a change of vessel, that he was not notified, and that his loss was the direct result of a failure to notify. It is, in my opinion, unnecessary to determine whether the notice of a change of vessel given to Farley & Sons, the brokers and freight forwarders, was notice to the libelants. If the carrier is not otherwise liable, it cannot be liable for the reason that the shipper has failed to insure. The libelants were notified by the so-called bill of lading that the goods might go upon another vessel. If they voluntarily disregarded this contingency, they took their chances. If they supposed the contract to be an absolute engagement to carry the goods upon the *Kansas*, they relied upon an erroneous construction thereof, and not upon the actual contract. In either event the carrier is not responsible for their failure to secure insurance that covered the actual risk. *Marx vs. National Steamship Co.*, 22 Fed. 680-685; *Red Wing Mill vs. Mercantile Mutual Insurance Co.*, 19 Fed. 115; *the Carolina Miller*, 53 Fed. 136. The libel will be dismissed, with costs to the claimant.

U. S. District Court, Southern District of New York.

COLLISION—STEAMER AND SAILING VESSEL—NIGHT—DUTY OF STEAMER TO SLOW—IMPROPER LIGHT.—The steamship *La Champagne*, while on one of her regular voyages from Havre to New York, and when about twenty-five miles from Shinnecock light on the Long Island coast, at about 5 o'clock a. m., collided with the schooner *Belle Higgins*, bound from a southern port to Bath, Maine. The evidence for the schooner was to the effect that she first made the steamer's white light on her starboard beam. Thereupon she showed a torch light to the steamer, and then another and afterwards fired a gun, notwithstanding which collision ensued. The steamer's testimony was that when the schooner's torch-light was exhibited ahead, or a little on the port bow of the steamer, they supposed it to be the light of a pilot boat, and exhibited a torch in reply, and altered their course to starboard, but without slackening speed. At the time when the gun of the schooner was heard, a faint, green light became visible, whereupon the steamer was stopped and backed, but too late to avoid collision. Held, that if the steamer justly mistook the schooner for a pilot boat—a fact that the evidence rendered doubtful—it thereupon became her duty to check her headway nearly to a stop, and that her continued high speed was a fault, and held that the evidence showed that the green light of the schooner was burning so dimly as not to be visible within the distance necessary to avoid her, and for such imperfect light she was liable. The damages were therefore divided.

VISIBLE SUPPLY OF GRAIN

As compiled for The Marine Record, by George F. Stone, Secretary Chicago Board of Trade.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY. Bushels.
Buffalo	462,000	637,000	110,000	10,000	110,000
Chicago	487,000	5,948,000	412,000	74,000	2,000
Detroit	37,000	52,000	20,000	4,000	.....
Duluth and Superior	389,000	1,217,000	28,000	9,000	32,000
Milwaukee	20,000	.....	.....	2,000	13,000
Montreal	28,000	45,000	481,000	10,000	19,000
Oswego .....	.....	.....	.....	.....	.....
Toledo	153,000	196,000	136,000	30,000	.....
Toronto	11,000	.....	10,000	.....	11,000
On Canal	33,000	2,098,000	6,000	9,000	40,000
Grand Total	5,850,000	16,123,000	2,910,000	401,000	256,000
Corresponding Date, 1897	16,729,000	21,956,000	8,005,000	1,675,000	812,000
Increase .....	.....	106,000	.....	.....	13,000
Decrease	1,047,000	.....	171,000	48,000	.....

While the stock of grain at lake ports only is here given, the total shows the figures for the entire country except the Pacific Slope.

THE Bethlehem Iron Company, South Bethlehem, Penna., has been asked to bid on the forgings for the engine and shafting of a torpedo boat to be built in Japan for the Imperial Japanese navy. The line of shafts, including the thrust and crank shafts, are to be hollow. It may be remarked that the Bethlehem Iron Co. is the only concern in this country that has been asked to bid on this work.

BIDS FOR NAVAL TONNAGE.

The Navy Department opened bids on Tuesday for sixteen torpedo boat destroyers and twelve torpedo boats, to cost in the aggregate not exceeding \$6,900,000, as provided in the last naval appropriation by Congress. These twenty-eight destroyers and torpedo boats constitute the largest single addition ever made to the navy. The destroyers are to be completed within eighteen months, and the torpedo boats in twelve months. According to the requirements of the department the destroyers are to have a guaranteed speed of twenty-eight knots and the torpedo boats twenty-six knots. The destroyers are to be about 400 tons and are to cost not more than \$295,000 each, while the torpedo boats are to be about 150 tons and to cost not more than \$170,000 each.

These destroyers will be the first vessels of that type added to the United States Navy, except those improvised from yachts during the recent war. They are to have twin screws, vertical engines, and a bunker capacity for carrying at least 100 tons of coal, affording some protection to engines and boilers. The vessels will be lighted throughout by electricity.

The first bid opened was that of the Bath Iron Works, Bath, Me., for one torpedo boat, speed 29 $\frac{1}{2}$ knots at \$161,000, or four at \$160,000 each; one destroyer of 29 knots at \$292,000, two at \$281,000, or three at \$250,500. Union Iron Works, San Francisco, Cal., destroyers, 29 knots, one \$294,000, two or three \$285,000 each; also destroyers, under second class, one \$294,000, two \$282,000, three \$281,500 each. Wolf & Zwicker, Portland, Ore., one torpedo boat \$170,000, two \$165,000, three \$163,400, four \$162,500; also destroyers, 29 $\frac{1}{4}$ knots, one \$289,000, two \$285,000, three \$282,000; also destroyers, one \$295,000, two \$291,000, three \$289,000. Neither Cramp nor Herreshoff bid. The lake shipbuilders were barred out of the competition owing to the treaty with Great Britain, whereby naval tonnage should not be built on the lakes by either power. It will take some time to decide which are the most advantageous trips, owing to the department's call for two classes of propositions, one based strictly on the department's plans and specifications, and others based on the individual ideas of the builders, all essential requirements being followed.

THE PINTSCH SYSTEM OF GAS BUOYS.

The Safety Car Heating and Lighting Co., New York, owners of the Pintsch system of buoy lighting, recently issued a neat little brochure containing the following:

The dangers of sea navigation, like the risks in all forms of travel, have surely been reduced to the minimum. Still, it is remarkable, that of the few accidents that do occur, or any of the delays that are occasioned, almost all happen when the ship is within a few miles of the port for whence she is bound. A notable instance of this kind occurred a short time ago, when one of the great trans-Atlantic greyhounds ran aground on the New Jersey coast. Similar mishaps, and the frequent delays that occur in all the great harbors, are due in a large measure to the inadequate precautions taken for marking by buoys and beacons the tortuous channels and danger points of our rivers and harbors.

Having in view these facts, it is not to be wondered at that the matter of river and harbor improvements is so constantly agitated in Congress, and even those who are not particularly interested in the subject become in a measure familiar with it, owing to the constant appearance of something relating to it in the daily press. This is as it should be, for the care and improvement of our harbors is certainly of the first importance.

One of the subdivisions of this greater question is the matter of coast and channel lighting. The progress made in that direction since the time that the celebrated light-house was erected by Ptolemy Philadelphus on the island of Pharos, opposite the wonderful city of Alexandria, up to the present day, when the Pintsch gas lighted buoy and beacon is the standard used by all the civilized countries of the world, has been great and quite equal to the improvements made in other directions. The steps of advancement were made slowly, however, and since the erection of the Eddystone Light, off Plymouth, England, which was completed in 1759, and which was looked upon as the beginning of a new era in light-house construction, the lights employed have been many, passing through the various stages of tallow candles, all kinds of oil, rosin, gas, etc., until the present successful and general use of the Pintsch gas buoys.

C. A. McDONALD & Co., of Chicago, general underwriters' agents, will sell the wreck of the burned sterner *George W. Morley*, on the beach at Evanston, Ill., Sept. 2.



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THE Michigan Naval Reserves have returned home after their four months' service and glory awaited them. Detroit citizens were especially exuberant, so also were the inhabitants of Saginaw. All honor to the Michigan "Yosemiters," also the Illinois brigades, but where do the Ohio "Jackies" come in.

THERE is a shoal spot at the entrance to Cleveland harbor on which several large vessels have fetched up within the past few weeks. It appears that the water has shoaled on account of a lack of dredging, and the U. S. Engineer in charge of the district has no funds that he can divert for that purpose. The city council refuses to be at the outlay, and it would seem as if the owners of the larger class of vessels might donate a small sum each to clear away the obstruction, so that their vessels could enter the port. The sum required would hardly amount to a good sized tug bill, several of which, owners have been obliged to meet. So surely the quickest and best way to make the port a safe one is the easiest in this case.

It was eminently right and proper that the lakes should have been called upon to furnish all adequate aid to the government in its settlement of the Spanish squabble. This having now been practically brought about, it will be in order for the next Congress to appropriate a sufficient sum to construct three more revenue cutters and a boarding officers' boat for Chicago, in place of those taken to the coast. It was quite an uphill struggle to get an appropriation to build the Gresham, Algonquin and Onondago, as well as the Chicago harbor patrol boat Calumet, and now that they are in all probability to remain in the coast service it would be a pertinent departure for the next Congress to authorize the construction of vessels to take their place.

AN article in this issue of the RECORD states that a Michigan inventor has perfected mechanism whereby an iron or steel ship's bottom can be cleaned readily of barnacles and submarine growths without the necessity of docking. The machine is described as a float surfaced with knives, placed obliquely. Oh, yes! knives placed obliquely is excellent for the cement covering the bare iron. Instead of a cleaning machine this appears to be a corroding apparatus, as it would soon get into the clean metal and in taking off the marine growth the vessel would soon require entirely new bottom shell plates. The Michigan inventor is perhaps unaware of the fact that while it is necessary to take the barnacles off, the bare iron must never be reached. As well might he think of turning a miniature plow loose around a metal vessel's bottom as to talk of a machine surfaced with knives placed obliquely to plane, plow or cut off the marine growth. The utmost care is always necessary when using any sort of a scraper to see that the bare iron is not reached, as if so, corrosion would set in at a rapid gait in salt water.

WANT CANAL TOLLS ABOLISHED.

It is a foregone conclusion that the extensive grain elevator, shipping and general marine interests of Buffalo, do not want the Welland canal tolls abolished. Including, or rather leading these influences, in so far as the Lake Carriers' Association is concerned, are the several lines of steamers forming the lake connection of the railroads from Buffalo to Chicago.

To make the Welland and St. Lawrence system of canals free of toll would be to drain a vast amount of business from Buffalo, which has already suffered this season through the opening of the Canada-Atlantic route from Georgian Bay east.

The Ogdensburg Transit Co., forming the lake line of the Central Vermont railroad, would benefit greatly by the abolition of the Welland canal tolls, and the manager of that line stands ready and eager to put up a good fight to this end, with Chicago interests in sympathy.

From a broad, liberal standpoint, it would seem to be for the good and welfare of the general interests of lake shipping to have the question brought before the Quebec commission and acted upon favorably toward American interests. On the other hand, should the influence against a reduction of tolls predominate, the question may then be settled for some time to come.

In this connection it is well to note the tenor of a Chicago special to-day, which states that the Lake Carriers' Association will take up the matter of abolishing the tolls in the Welland canal without any further delay. Telegrams and letters have been reaching the office of Capt. J. S. Dunham, president of the Lake Carriers' Association, asking that a meeting be called to take action in the matter. In response to these requests Capt. Dunham has appointed a committee, composed of Secretary Charles H. Keep, of Buffalo, Harvey D. Goulder, of Cleveland, counsel for the association, and J. H. Westbrook, manager of the Ogdensburg Transit Co., to act for the association in the matter. He has also notified many vesselmen of this action. The committee will at once prepare the address to the Anglo-American commission, now in session at Quebec, and urge that the canal tolls be removed from all classes of American vessels passing through the Welland canal, and incidentally the St. Lawrence River canals which are in course of improvement, and will within a year have the same capacity as the Welland.

"There was no time left to call a meeting of the whole association," said President Dunham. "It would take some time to get out notices, and the meeting could not be called within a week from that time anyway. I thought it the shortest way to appoint the secretary, upon whom a great deal of the work would fall, the counsel, and Mr. Westbrook, who is vitally interested in the matter, as his boats are regular traders through the Welland canal. They will appear before the commission within a few days. While the sealing, fishing and boundary questions are being settled the Canadians may as well grant this concession. It will mean that the smaller vessels on the lakes, which are being driven out of the business by the big boats, will be given a new trade for themselves, and one where they may make a little money. It will furnish business for fully one-quarter of the number of boats on the lakes, and a great deal of the grain trade for export will go to tidewater through Canadian elevators."

The Chicago Board of Trade committee will hold a meeting on Thursday to take action and it is expected that other commercial organizations around the lakes will also take the matter up and endeavor to have the Dominion artificial waterways made free.

This question has been worked on before, and at great length. The principal contention at the last consideration being that if the Dominion opened its artificial waterways free to all users, then, at least, the Erie canal should also be made free to all comers. The hitch in this connection lay chiefly in the fact that the De Witt Clinton ditch was a state and not a national highway in point of ownership, vested rights, etc., and the argument consequently fell to the ground.

While it is almost certain that the majority of lake vessel owners would prefer to see the Welland canal tolls abolished, it will take a vast deal of argument to prove to the antagonists of such a measure that it is right to rob Peter to pay Paul, or in other words, that trade should be diverted from an American port with the present and ultimate results of upbuilding and advancing the commerce of the Dominion of Canada. It should not be forgotten, however, that Ogdensburg, Oswego and other American ports would share the advantages to be gained by this certain increase in Lake

Ontario traffic and a partitioning of the advantages hitherto enjoyed principally by Buffalo and fostered by the Erie canal as a feeder east and west.

Whatever the outcome of the present agitation may be, it would be highly advisable for the most prominent members of the Lake Carriers' Association to see that no irreparable breaches are made in the ranks of the association, through unalterably opposing views regarding the continuance or abolition of the Welland canal tolls, though it is somewhat unfortunate that in the interview with Capt. Dunham, as president of the Lake Carriers' Association, it is sent broadcast over the lakes that the object, or at least one of the results of an abolition of the Welland canal tolls will be that a great deal of the grain trade for export would then go to tidewater through Canadian elevators. Surely Mr. Carr, as spokesman of the United Marine News Service Association, did not wish to put Capt. Dunham in the light of seeking the advancement of Canadians, to the detriment of the citizens engaged in business in the United States. This portion of the project should, at least, have been more discreetly handled until the culmination of their desires.

THE custom of owners making a total abandonment of a wrecked vessel to the underwriters, and the laws and rules regarding same, will have to come to a point in the lake trade at an early date. We have had enough and to spare of total abandonments, after which the underwriters step in and create salvage claims, either the underwriters accept the notice and settle for an actual or constructive total loss, or they may keep their hands off other men's property. It is possible that contemporaneous with the notice of total abandonment, owners can enter action against the assurers for the full amount of insurance, and then await further action. The underwriters, by becoming salvors, by no means alters the fact of the total abandonment by the owners. It rather strengthens the original proceeding if anything. Of course there must be justifiable reasons for a total abandonment, otherwise owners must act immediately, skillfully and prudently, as if not insured, and for their own best interests as well as that of others, so as to make the casualty only a partial loss, or that, at least, would be all that the assured could or should recover from the assurers. We opine, that before an underwriter can put a hand on a vessel that has been totally abandoned, they must accept the abandonment, and then they can sail in to their hearts' content on salvage operations, rescuing whatever is possible, but, until the notice of abandonment is accepted they have no more right or reason to work up bills against an owner, or work them down, than they have to build a new ship for him of an entirely different type to what he requires. There is being a whole hornets' nest stirred up in this matter just now, and few vesselowners see their way out of it, but they should stand on their rights, and on determining that a vessel is a constructive total loss, hold to her if only by placing a big black dog aboard until their underwriters accept the risk which the policy covered, but, see that the insurance policy covers the situation, and that there are no ambiguous clauses contained therein. The owner of a large fleet is always right. Now let the minor fellows look out for themselves.

So, an owner of private lights exhibited in St. Mary's river threatens to stop traffic at night unless he receives compensation at the hands of individual vessel owners! The United States Light-House Board ought surely to be in a position to remedy such an evil as this appears to be. Why are private lights permitted to be used? If there is a necessity for them then the Light-House Board is a ponderous enough institution to pay for them. The commerce of Lake Superior, or that portion of it carried on between sunset and sunrise, should not be placed at the mercy of a private individual. If it is necessary for Rains to keep lights on St. Joseph's Island then let him be paid for it and if there is any question about this compensation the sum might be divided up in some way between the United States and the Dominion of Canada, but the man ought to be paid.

AMERICAN sailors serving in the U. S. Navy will not thank Lieut. Hobson, U. S. N., for attempting to spread the word "Jackies" as signifying U. S. N. blue jackets. Jacky is too much like the monkey name Jacko. Of course they are not Jennies or Jumbos, any more than the officers are brass-bound Jockies. It ill becomes officers of the U. S. Navy to publicly perpetrate nicknames on the members of a crew, however the slang may be used on shipboard. Anything for short, but the lieutenant might attend to his dignity a trifle now and give others their due as well.

Naval ascendancy and power so that all maritime nations may realize the proper position of the United States among the nations of the earth is "a consummation devoutly to be wished," but while we are wishing, let us wish for an adequate mercantile marine, and take energetic as also well advised measures to bring it about. This can be done wholly and solely through legislation. Capitalists will not withdraw their money from a sure ten per cent. investment to take chances on a risky fifteen per cent., then let the latter be as assured as the former and money will spill into the coffers of the discreet shipowner and the United States will carry its own commerce, imports as well as exports, under the stars and stripes and in American-built vessels. It is not true that our former commercial maritime activity was wrested from us by designing foreign rivals, and it is only a piece of political humbug or waggery to say so; iron and steel and steam was the entering wedge in so far as shipbuilding, or the lack of it, was concerned, and internal development was the lodestone that kept our attention diverted from the commerce of the oceans. Now let us get back on earth again, or rather on the waters thereof, by framing such legislation as will induce Americans, citizens of the United States, to become sailors and shipowners.

THE Navy Department has ordered the keel laid for a bark-rigged sailing vessel, to be used as a practice ship for the youngsters, and p'raps some of the oldsters too, in the service. What, we ask, is being done in this connection for the merchant service? The present administration has an excellent opening in the naval reserve branch to make a nursery for the future great mercantile marine. Let a schoolship be stationed at each important United States sea port, and lake port too, for that matter, place competent instructors aboard and train the young idea how to climb, shoot, handle a marline-spike, tack ship, or take command.

THE LAKES REQUIRE REVENUE CUTTERS.

The American-Spanish war has at least robbed the lakes of three handsome well equipped revenue cutters that were built by the Globe Iron Works Co., Cleveland, for lake service. The Gresham, Algonquin and Onondago, are first class modern little vessels provided by Congress for lake service, but two are now on the coast and the third is being got ready to go through the canals also.

Relative to these vessels being returned to the lakes, it has been decided by the officials of the Treasury Department that until Congress meets no move will be made looking to their transfer from the Atlantic coast. Assistant Secretary Howell has intimated that an effort would be made to have Congress provide for the construction of new vessels for the lake service. It has been suggested that the Comanche or other yachts which can be taken through the St. Lawrence system of canal locks be transferred from the auxiliary navy to the revenue cutter service, but it is understood that the officers of the service do not favor the idea. In the meantime the lake service will have to be contented with the old side-wheeler Fessenden stationed at Detroit, and making periodic trips to other lake ports.

NIAGARA RIVER SURVEY.

Government engineers are now surveying the Niagara river very thoroughly. They expect to be engaged on this job all this season and part of next. The work is being carried out with all the exactness of a geological survey, boring into the river bottoms as well as taking soundings. When the engineers are through they will have a chart of the river bottom as well as the depth of the water. The work will probably be carried far enough to settle the dispute that has long been carried on by the government authorities and the tug men at Buffalo as to the actual depth of water in the river. It is usually stated that there is 18 feet of water on the ranges from the lake down, but the tug men not only say that there is no such depth to be depended on, but that the ranges are unsafe at ordinary depths and that they are obliged to follow a course of their own, and so they have gone on maintaining for season after season although accurate soundings have been taken each year by the Engineer Department, and ranges placed in accordance with the depth of water given on their bearings, yet there has always been an open controversy regarding the published and actual depth of water as well as the utility and safety of the ranges.

TO SCRAPE SHIPS' BOTTOMS.

H. C. Bristol of East Tawas, Mich., is the inventor of the process by which he claims a ship's bottom can be cleaned readily of barnacles and submarine growth, without the

necessity of docking. The apparatus is a float of great buoyancy, surfaced with knives placed obliquely. The float is dropped into the water and handled with lines that run entirely under the bottom of the ship, two being on each side of the hull. The float is drawn down towards the keel, its buoyancy presses it hard against the hull, and the knives do the rest.

THE OWNER OF PRIVATE LIGHTS.

A circular letter is being sent to vesselmen by Arthur Rains, who owns the range lights on St. Joseph's Island, St. Mary's river. These light show the new channel at the encampment, and Rains says the lights will be discontinued, if he is not paid for maintaining them. Some of the managers of the largest lines have refused to settle with Rains. It is stated that if the lights are allowed to go out boats will not be able to run the St. Mary's river at night.

A LARGE GRAIN CROP.

The first consignment of wheat has reached Superior-Duluth from Dakota, and from this on it is expected that shipments will reach there at a lively gait.

The spring wheat crop in Minnesota and the Dakotas is reported as a large one. The estimated yield this year for the three states is 190,000,000 bushels as against 130,000,000 bushels in 1897, distributed as follows: Minnesota yield, 88,000,000, acreage 5,500,000; North Dakota yield 63,800,000, acreage 4,700,000; South Dakota yield, 36,000,000, acreage 3,000,000. Total yield 187,800,000, acreage 13,200,000. The average yield per acre shows less increase, however, than the total yield would indicate, because of an increase of acreage of about 2,000,000 acres. The crop cannot be called a "bumper" yield, though the total yield is well up in 1895's famous record.

LAUNCH OF THE WILMOT.

The tug R. M. Wilmot, building at the yards of the Globe Iron Works Co., Cleveland, will be launched on Saturday. The Wilmot is a sea-going towing and wrecking boat, fitted with all modern towing appliances, and is owned by the W. G. Wilmot Co., of New Orleans, La. Her wrecking pumps have a capacity of 200,000 gallons per hour. She is built entirely of steel, including the cabin. She is 156 feet over all, 50 feet beam and 26 feet deep, and is built after the company's own designs. The cabins will be luxurious and finished in mahogany. The plans call for a speed of 20 knots, which will make the Wilmot the fastest tug boat ever built at a lake yard.

NO NEW TRIAL.

The disastrous Yukon-Torrent collision in the St. Clair canal in the summer of 1896 came up again in the United States district court at Detroit on Friday. It will be remembered that the large schooner Yukon, in tow of the steamer Sitka, took a sheer while in the canal and her towline scraped the upper part of the tug Torrent, bound in an opposite direction. Capt. Ralph Hackett, of the Torrent, was killed outright and two others of her crew, one of them David Kiniri, swept overboard and drowned. His widow, Bertha N. Kiniri, brought suit in the district court against the Wilson Transit Co., of Cleveland, owner of the Sitka and Yukon, and in March, 1897, she received a verdict for \$5,000. The company later filed a motion to have the verdict set aside and a new trial ordered. Judge Swan denied the motion.

A CHICORA RELIC.

Capt. H. E. Stines, master of the Goodrich Line steamer Virginia, has been presented with a novel specimen of woodwork done by an Indian. It recalls the fate of the steamer Chicora of the Graham & Morton line, which foundered with all on board on January 21, 1895 somewhere at the south end of Lake Michigan. Capt. Stines of the Virginia was a brother to Capt. Stines of the Virginia, and this work by J. P. Shashaquay of Saugatuck, Mich., is a picture-frame made from pieces of wood drifted ashore and identified as part of the Chicora's wreckage. The frame is intended to hold the portraits of the unfortunate Capt. Stines and his son, who went down with the steamer. The frame is 18 inches square and is made of oak, cherry, mahogany and pine. At the top is a perfect reproduction of the lost steamer inlaid in wood. The work is executed in great detail. Quaint designs from the different woods have been carved out and tastefully put together about the openings intended for the portraits. In the lower center is the carved figure of an Indian girl and surrounding the whole frame is a laurel wreath.

THE INTERNATIONAL CONFERENCE AT QUEBEC.

The International Conference now in session at Quebec is the most important meeting since the boundary between the two countries was arranged fifty years ago. The Canadian commissioners appointed were Sir Wilfrid Laurier, Sir Richard Cartwright, Sir Louis H. Davies and John Charlton, but Mr. Charlton has declined serving as the subjects to be considered relate to Canada alone, the British commissioners are mainly selected from the Dominion, the exception being Baron Herschell, late the British Lord High Chancellor, and Sir James Winter, the Premier of Newfoundland, who has been given permission to participate, as his colony is vitally interested in the disposition to be made of the fishing question.

The American commissioners are John A. Kasson, of Iowa, John W. Foster, of Washington, D. C., Senator Charles W. Fairbanks, of Indiana, Senator George Gray, of Delaware and Representative Nelson Dingley, of Maine. To this commission it has been reported that the name of T. Jefferson Coolidge, of Massachusetts, was to be added, to offset the additional British appointment of Sir James Winter.

To understand the importance of the work of this representative body of commissioners it is only necessary to read the matters referred to them for consideration, as announced at Ottawa.

The list follows:

First—The questions in respect to the fur seals in Bering Sea and the waters of the North Pacific Ocean.

Second—Provisions in respect to the fisheries of the Atlantic and Pacific coasts and in the waters of the common frontier.

Third—Provisions for the delimitation and establishment of the Alaska-Canadian boundary by legal and scientific experts, if the commission shall so desire, or otherwise.

Fourth—Provisions for the transit of merchandise to or from either country across intermediate territory of the other, whether by land or water, including natural and artificial waterways and intermediate transit by sea.

Fifth—Provisions relating to the transit of merchandise from one country to be delivered at points in the other beyond the frontier.

Sixth—The question of the alien labor laws applicable to the subjects or citizens of the United States and Canada.

Seventh—Mining rights of the citizens or subjects of each country within the territory of the other.

Eighth—Such readjustment and concessions as may be deemed mutually advantageous of customs duties applicable in each country to the products of the soil or industry on the basis of reciprocal equivalents.

Ninth—A revision of the agreement of 1817 respecting naval vessels on the lakes.

Tenth—Arrangements for the more complete definition and marking of any part of the frontier line, by land or water, where the same is now so insufficiently defined or marked as to be liable to dispute.

Eleventh—Provisions for the conveyance for trial or punishment of persons in the lawful custody of the officers of one country through the territory of another.

Twelfth—Reciprocity on wrecking or salvage rights.

On account of the recent war and the events growing out of it, the feeling between the United States and both England and Canada is especially good. It is therefore, a fortunate time for a conference having for its object the settlement of old controversies.

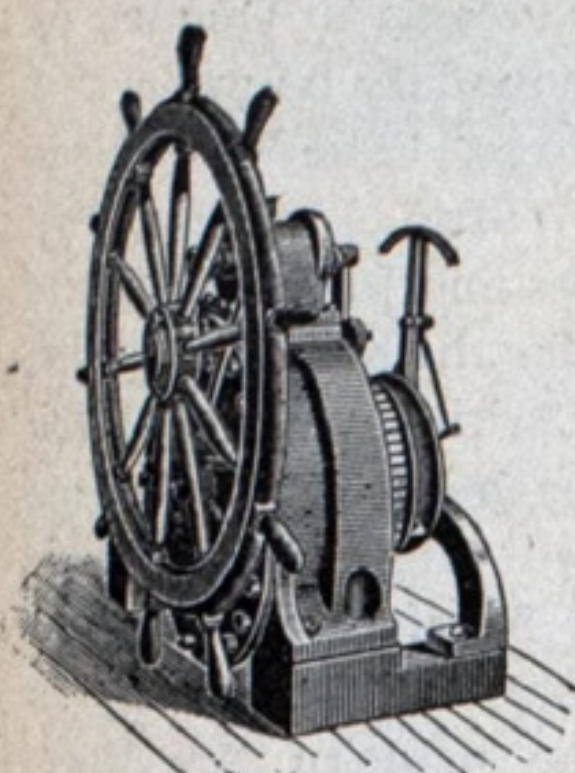
DEATH OF A PIONEER SHIPBUILDER.

John E. Bailey, of Toledo, pioneer shipbuilder and banker, is dead.

John E. Bailey was born in Burk, Vermont, September 30, 1817. When he was two years of age his parents moved to Ohio, settling at Madison. Young Bailey's early life was uneventful, and he finally married and located at Painesville. While there he and his two brothers constructed a shipbuilding plant at Fairport.

In 1868, he and his brother D. E. Bailey established a shipyard at the foot of Ash street, Toledo. They gained a great reputation along the lakes, and turned out some of the largest and best vessels ever built up to that time, among them being the David Dows (the only five-masted vessel on the lakes when she was built) the George W. Adams, City of Painesville, Wilcox and Halloran. They employed a large number of men, and had as many as five vessels on the stocks at one time. When iron and steel ships came into general use, the Baileys gave up the business.

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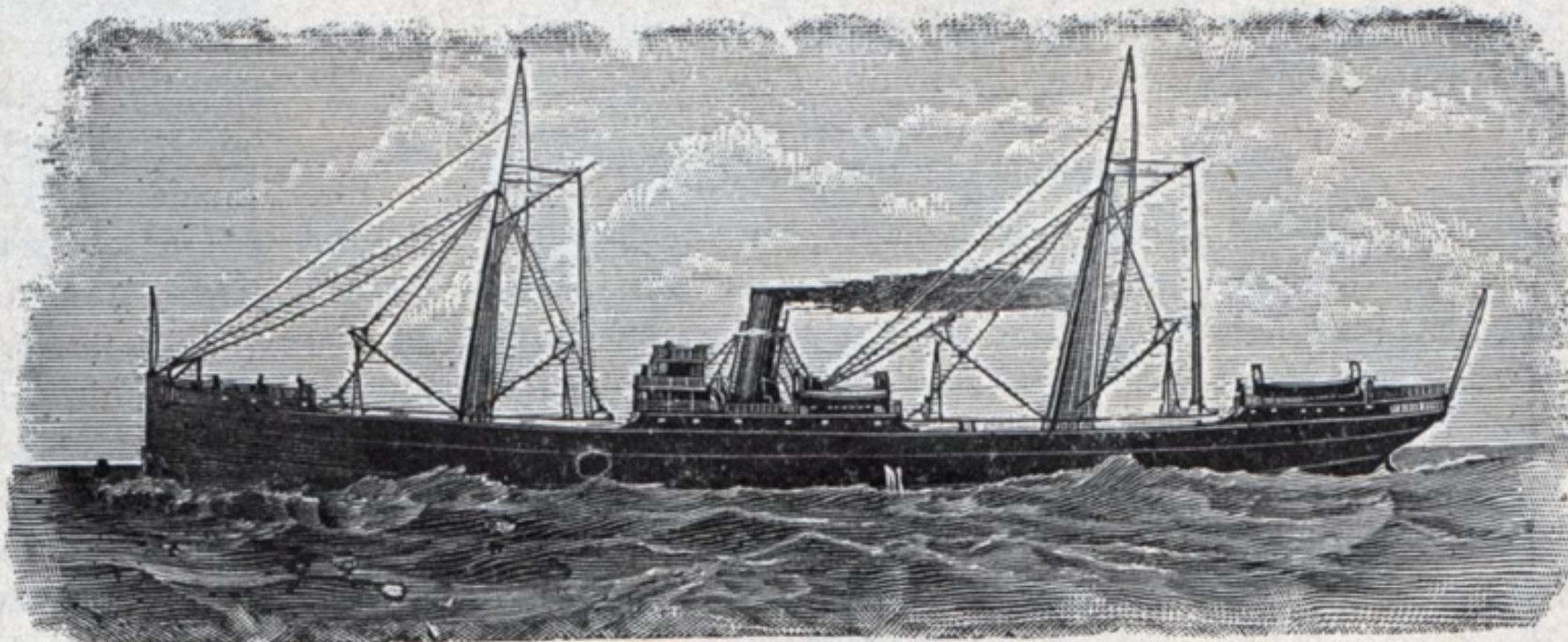
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MORE WATERSPOUTS.

"I've been on the lakes for some years," said First Mate J. E. Reynolds of the steamer Kittie M. Forbes, to a Buffalo Courier man last week, "and I've had some rather exciting experiences, but I don't care for another such as we had coming down this trip. I don't mind a good blow, with the waves rising over the bows like a small Niagara and washing everything overboard that isn't fast and snug, but when it comes to dodging waterspouts, I prefer to be on a trifle livelier craft than an ore steamer.

"What? No waterspouts on the lakes? Well, I've said the same thing myself, but that was before this last trip. I'll swear now that they exist. Not now and then a solitary specimen, like the old lake schooners, but a dozen of 'em at once, big, husky fellows, too, which, had the Forbes come in their way, would have smashed her to bits, or swept her up in the whirl on the same principle that Elijah is said to have taken an aerial journey.

"We cleared from Ashland with ore, and on Saturday morning were about 20 miles east of the Dummy. There was a fresh 10-knot breeze, and the sun was shining as bright as could be. The captain was at the wheel, and had her course laid due east, calculating to touch at Ash-
tabula.

"About 8 o'clock I noticed a black cloud forming on the starboard quarter. It kept growing bigger and blacker, and rising higher and higher. It seemed to gain on the ship, and we began making preparations for a blow. In a little while the cloud was to our bow, racing along on a parallel course, but not going up into the sky far enough to obscure the sun.

"Then a peculiar thing happened. A portion of the cloud seemed to drop down toward the water. The section was forked like the tail of a fish, and it dropped lower and lower until it nearly reached the water. Then the lake directly under it began to boil. We could see the water whirling round and round, and then begin to rise to meet the descending cloud.

"Then they came together and the cloud seemed to rise up again, taking tons and tons of water along with it. We had none of us ever seen a waterspout before, but we knew this was the genuine article. The spout appeared to be about 10 feet in diameter and connected the great

cloud and the lake like a big cable. It was black as the cloud and seemed to be surrounded by a heavy mist, which, after a little, when the strange freak got nearer, we found was descending water, falling like the spray from a fountain.

"All the time the sun was shining and the falling mist was turned into a rainbow that danced and flashed about the column of water in a way that I can't describe. It was the prettiest sight I've ever seen.

"But it wasn't long before another part of the cloud began to descend and another section of the lake to boil and rise, and pretty soon there was another waterspout racing alongside of the Forbes, a bit closer than the first, and we began to think it inclined to be a trifle too familiar.

"Right along on our starboard side the two black fellows raced, and worse yet, another and another was formed, until seven of the big columns of black water were waltzing and swaying along, some pretty close to the ship, others further away to the south'ard.

"Sometimes the columns of water would move along as stiff and straight as a squad of soldiers, and then they would begin to stagger and swing around like a lot of drunken fellows trying to do a cake-walk.

"All the time the water for 100 feet about the base of each pillar was churned into white foam, and I tell you it was an awful sight. There wouldn't have been a ghost of a show for any lake vessel once in among the racing columns of water, and we were moving along right at the edge in a parallel direction, not knowing at what minute the wind would veer and send them all in our direction.

"Our greatest fear was that the big fellows in their crazy gyrations might collide and go to pieces. Were they to do so, it meant a sudden fall of tons upon tons of water, and if the Forbes should be in the path of the descending flood, you can guess what the result would be. After a while the first waterspout began to disappear, just as it had formed, the cloud at that point settling lower and lower, then separating from the lower part of the column, and rising away again while where it had been the water once more became comparatively quiet.

"One by one they disappeared, and we were beginning to congratulate ourselves on our good fortune when I saw the captain turn the wheel sharp. What do you think?

Why there dead ahead and nearer than any of the others was the king-pin of all. It looked to be half a mile in diameter, but wasn't black like the others, having more the appearance of a big waterfall.

"We just naturally concluded that we could see our finish then. You know sailors are superstitious, and I guess some of them thought the Falls had taken a move up the lake since the last trip down, from what they said.

"The wind seemed to slacken a bit, and that helped us, for the big waterspout didn't move as rapidly as the other had, and it was soon also well to starboard, and thus we gradually worked away from it. That, too, shortly afterward began to disappear as the smaller ones had done, and in an hour and a half from the time the cloud had first appeared, it and the cables it had picked up, as if to tow itself along, had all disappeared and the sky was as clear as before."

Capt. James Montgomery, master of the Kittie M. Forbes, was asked his impressions of the peculiar lake phenomenon. He corroborated the main details of the mate's story, and declared that he had never seen anything to equal the spectacle presented by this strange freak.

"I've heard a good many lake men tell of seeing waterspouts here, but I always gave them a grain of allowance. I supposed they were only found on the ocean, but I can back up their stories with my own experience now.

"I must confess that I was a bit scared of the big fellow dead ahead of us, for I had heard that these strange formations burst sometimes, and I knew the Kittie M. would be sure to go down should that mass of water fall upon her. I think that prompt action in sheering off to the nor'ard prevented a collision, and probably the fact that the wind eased up aided our escape.

"I counted seven of the waterspouts, and it was more than an hour and a half from the time we saw the first one until the last had disappeared. They were of varying size, from that of a man's body to that of a house. They seemed to extend from the surface of the lake clear into the clouds."

Capt. Wm. Ryan, one of the oldest marine men in Canada, died at his home in Kingston this week from the effects of a stroke of apoplexy, he was aged 74 years. He leaves a widow and several grown up children.

TREASURY DECISIONS.

MANIFEST OF VESSEL'S CARGO—COASTWISE CLEARANCE AND PERMIT—CERTIFICATE OF DEPOSIT OF SHIP'S REGISTER.

TREASURY DEPARTMENT, August 10, 1898.

Sir: Replying to your letters of the 5th and 23d ultimo, concerning war-revenue stamps, I have to say:

The manifest stamp for clearance of cargo for any foreign port, except in British North America, depends on tonnage, and may be found on page 16 of the war-revenue bill. Manifests of cargoes for or from British North America or domestic ports are exempt from tax.

The vessel as a carrier is required to furnish each shipper with a blank manifest, with 1-cent stamp affixed, on which each shipper makes out the list of his part of the cargo. This is not required in the case of a vessel from or for British North America, or any port of the United States.

Coastwise clearance and permit (Cat. 483) is exempt. Certificate of deposit of ship's register (Cat. 568) is exempt. The other questions you ask will be answered upon consultation with the Commissioner of Internal Revenue.

Respectfully yours,

W. B. HOWELL, Assistant Secretary.
Collector of Customs, Port Huron, Mich.

TREASURY DEPARTMENT, BUREAU OF NAVIGATION,
WASHINGTON, D. C., August 12, 1898.

Editor of the Army and Navy Register, Washington, D. C.:

Sir: Replying to a letter from the Argonaut, inquiring as to the different methods of giving American registers to vessels, I have to say that foreign built vessels may acquire American register: First, by special act of Congress; second, by capture in war by citizens of the United States, and lawful condemnation as prize (Rev. Stat., 4132); third, by forfeiture for breach of the laws of the United States (Rev. Stat. 4132); fourth, by wreck in American waters and the expenditure in repairs of three-fourths of the value when repaired (Rev. Stat., 4136).

RETURN OF AMERICAN-BUILT VESSEL.—An American-built vessel which has been sold foreign (except such as were sold "during the rebellion," see Rev. Stat., 4135) may again receive an American register, first, by act of Congress; second, by Revised Statutes, 4165, as amended by section 10 of the act of March 3, 1897, reading:

"A vessel registered by law which by sale has become the property of a foreigner, shall be entitled to a new register upon afterwards becoming American property, unless it has been enlarged or undergone change in build outside of the United States."

MILITARY AND NAVAL, CHARTERS AND PURCHASE.—While prizes may thus obtain American registers, foreign built vessels bought or chartered by the War or Navy Department do not thereby become entitled to be registered American vessels, but a special act of Congress in each case is required to entitle them to the benefits and privileges appertaining to registered vessels of the United States.

RIGHT TO WEAR THE AMERICAN COLORS.—Any foreign built vessel purchased entirely and in good faith by an American citizen is entitled to the flag and protection of the United States, but is not entitled to the benefits and privileges of vessels of the United States.

Respectfully yours,

Approved: EUGENE T. CHAMBERLAIN,
L. A. GAGE, Secretary. Commissioner.

EASTERN FREIGHT REPORT.

Messrs. Funch, Edye & Co., New York, in their usual weekly freight report to the RECORD, state they cannot, as yet, report any decided improvement in freights, although a firmer undercurrent is generally perceptible, and we confidently hope that we are not very far from a turn for the better, especially in grain freights. Berth freights equally continue dull, but the amount of open tonnage, both for full and part cargoes of grain, has perceptibly diminished. Our list of charters for deals continues fairly active, whilst the demand for timber boats has, for the moment, ceased. A number of vessels have been taken up for time on short periods, in order to supply pressing wants at Cuba and Porto Rico. Several fixtures are again reported for cotton from the Atlantic ports at or about 36s. 3d., the rate previously reported and at which figure a moderate demand for tonnage continues. A number of boats have again been fixed for coal, and it begins to look as if this business had come to stay.

There is nothing of interest to report regarding sail tonnage, which remains in limited demand, although the supply is moderate. Rates show no change, but the market is evidently not strong, and we fear any change, if occurring, would be in favor of shippers.

THE LEGAL DUTIES OF SHIPMASTERS.

The list of works placed upon the market for the enlightenment, education and entertainment of the sailing commu-

nity is growing larger month by month. Messrs. Griffin have done well for the community in publishing an excellent series of navigational works, and with these aids in possession and the time on hand, there will be less excuse for the shipmaster and his officers being unacquainted with the different branches of their onerous business.

The "Legal Duties of Shipmasters" is a very concise and well arranged little volume, which is published as one of Griffin's Nautical Series, edited by Edward Blackmore. It may be justly termed a handbook written in clear and non-technical language, and is intended as a simple means for the young sailor to gain a knowledge of the elements of his profession by private reading and without difficulty, so as to enable him to direct his conduct when out of reach of other advisers. As the author has frankly stated in the preface, it is no attempt to make every shipmaster his own lawyer. Such an endeavor would no doubt be a hopeless task and could not in any way benefit the shipmasters' profession in any reasonable degree.

In the first place the author deals with the qualification for position of master, and sets forth the essential features which have any bearing on the point. He then proceeds to discuss the contract with the owner, detailing what he may and may not do, and for what offences he may be discharged. The master's duty in respect to the crew is then touched upon with regard to engagement, discipline, provisions, accommodation, medical comforts, and the payment of wages and discharge. The next important subject set forth is the master's duty in respect of the passengers, which is gone into with much subdivision of heads. A short statement is made of the master's financial responsibilities, and a longer one is made with reference to the master's duty in respect of the cargo.

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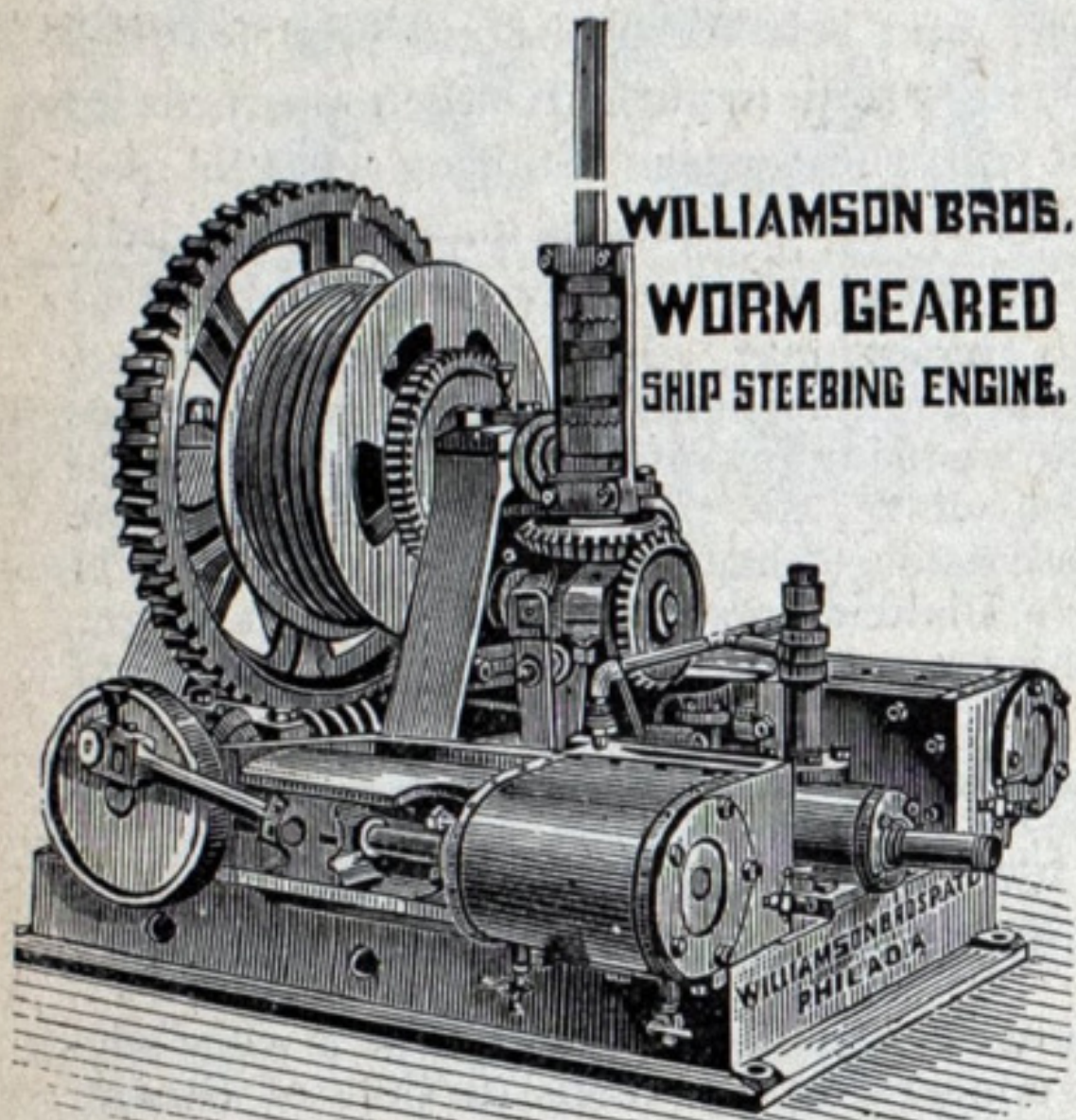
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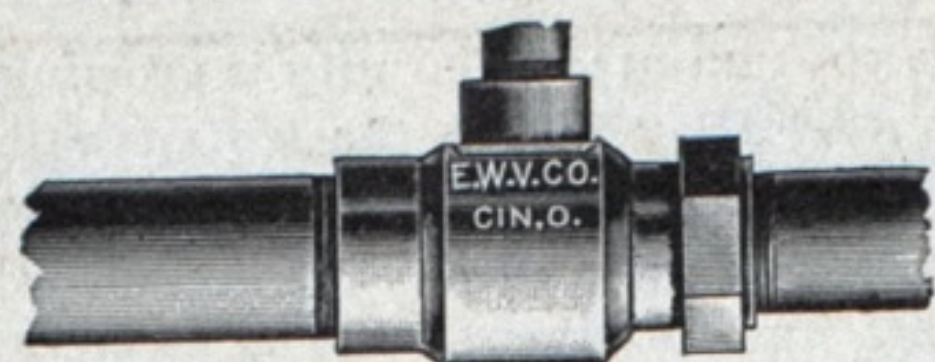
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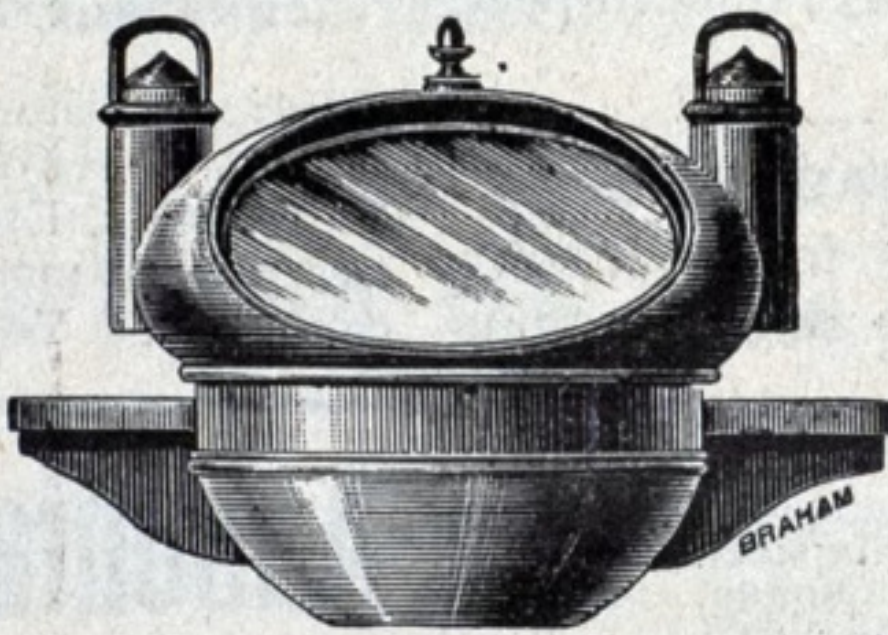
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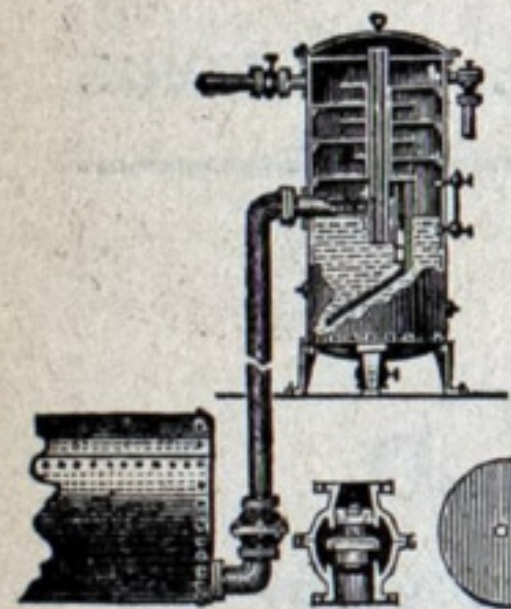
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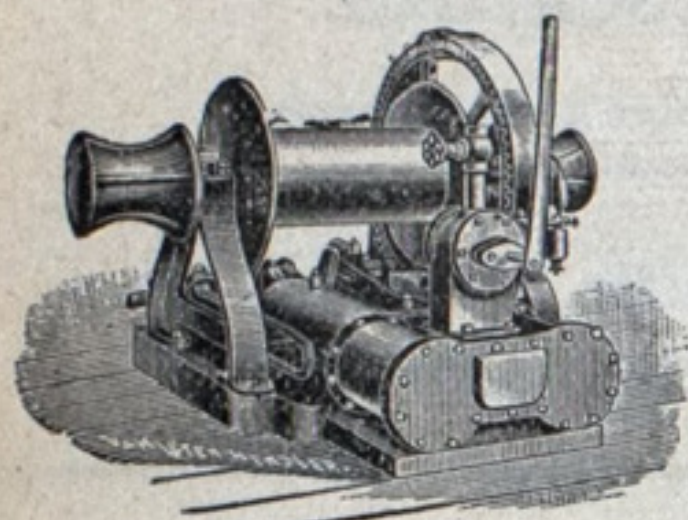
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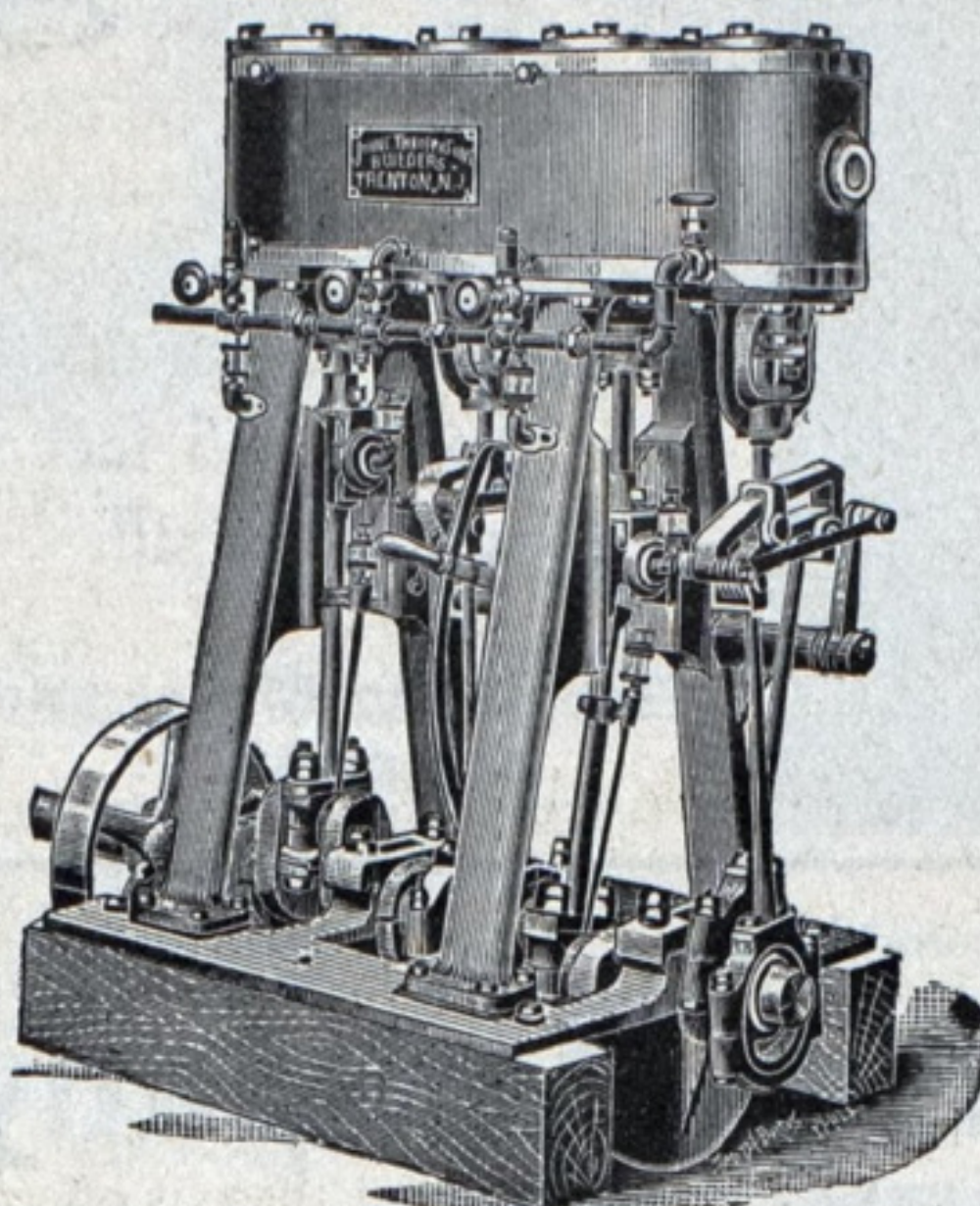
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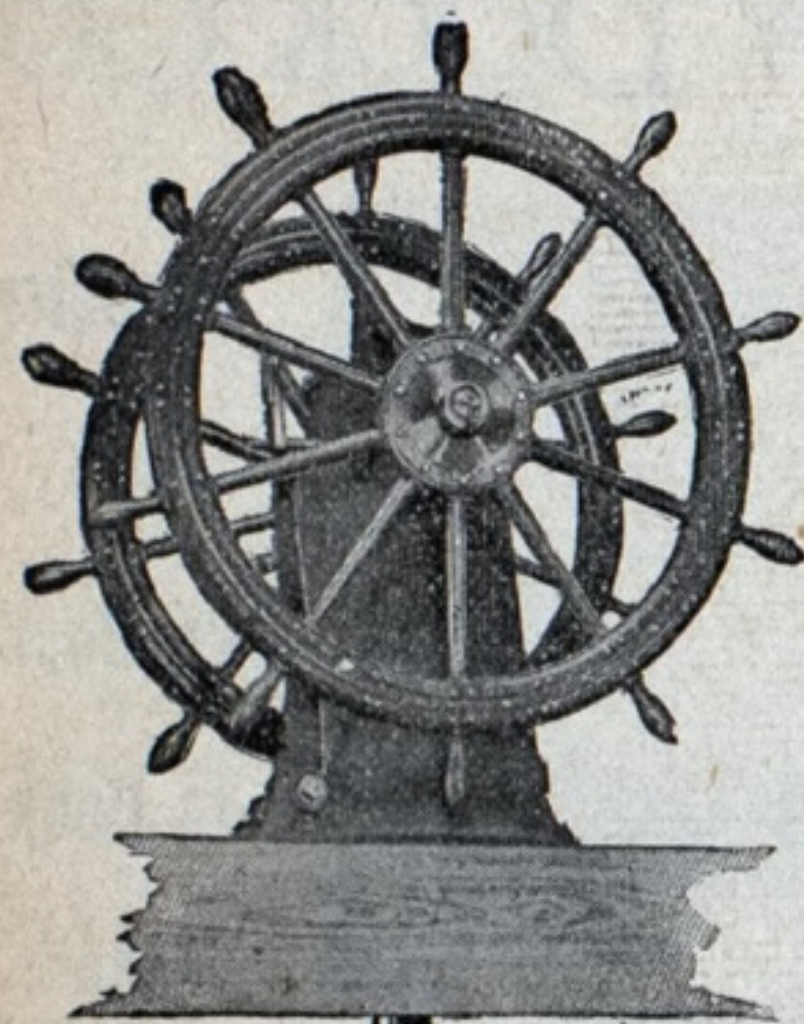
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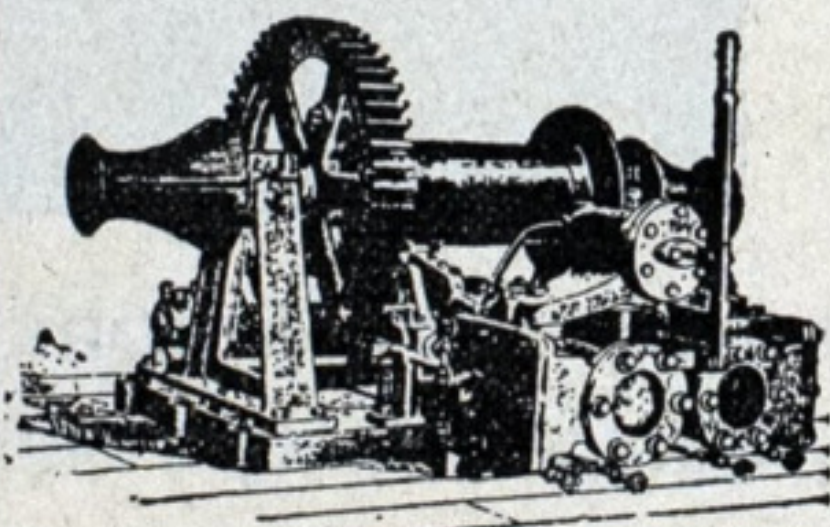
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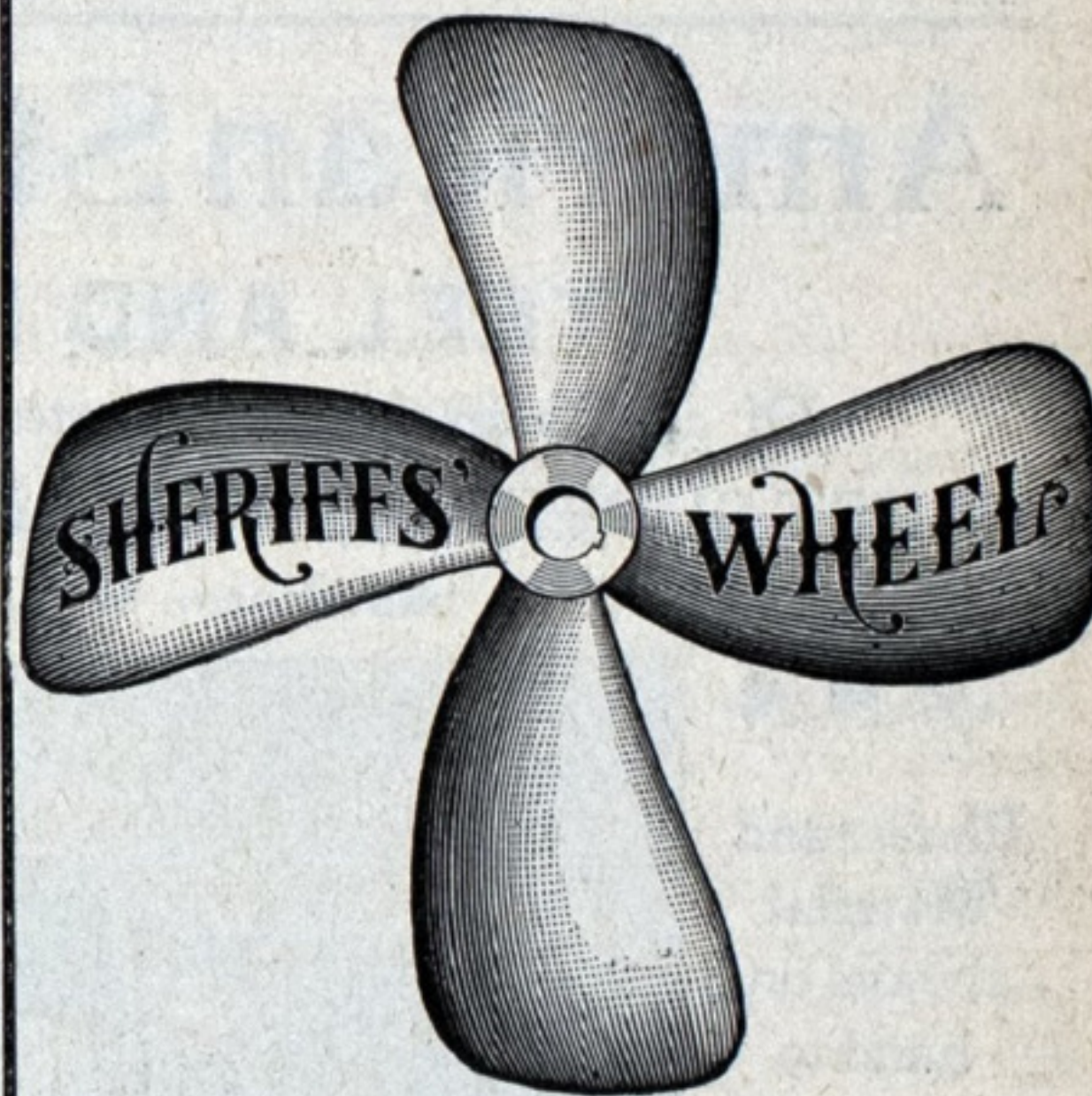
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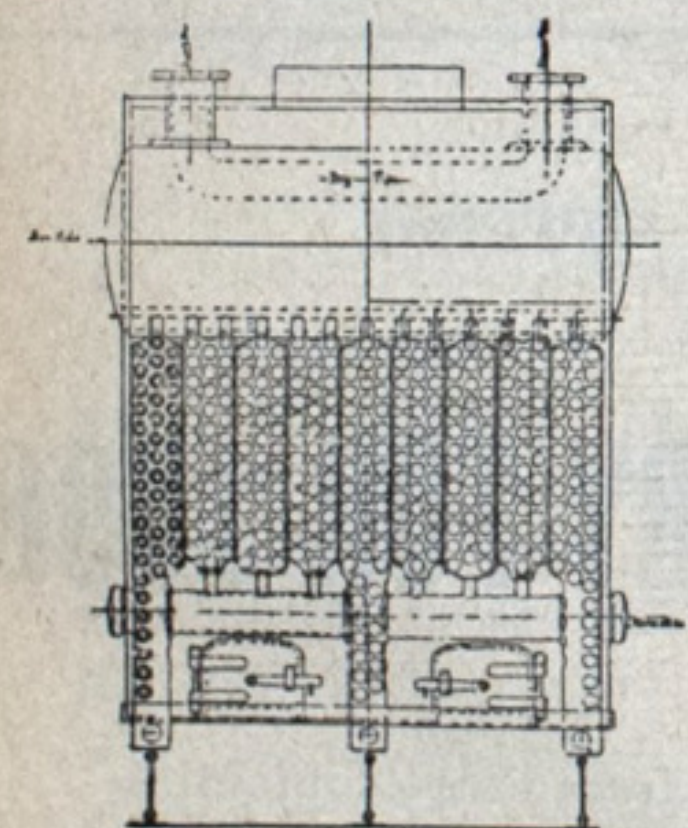
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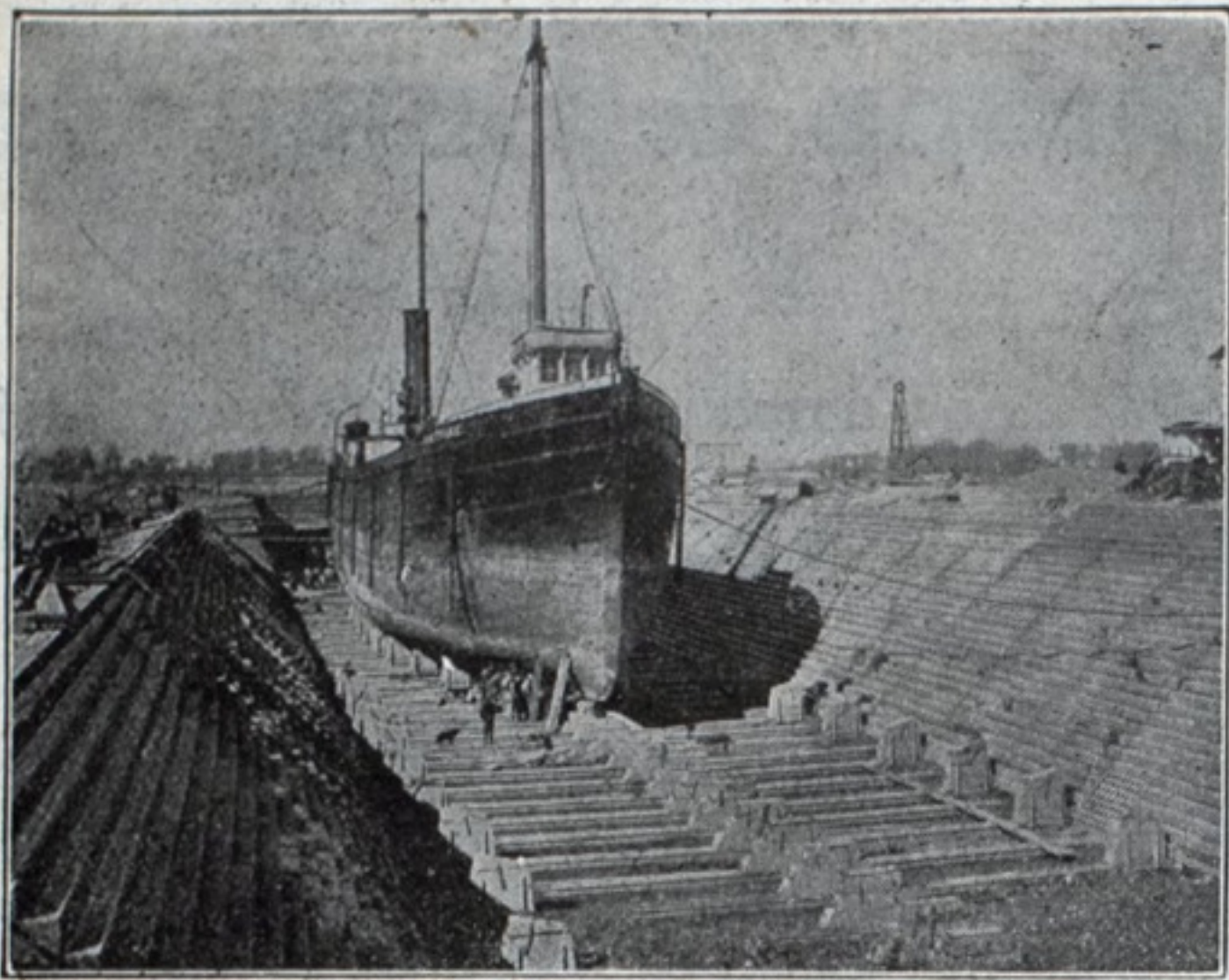
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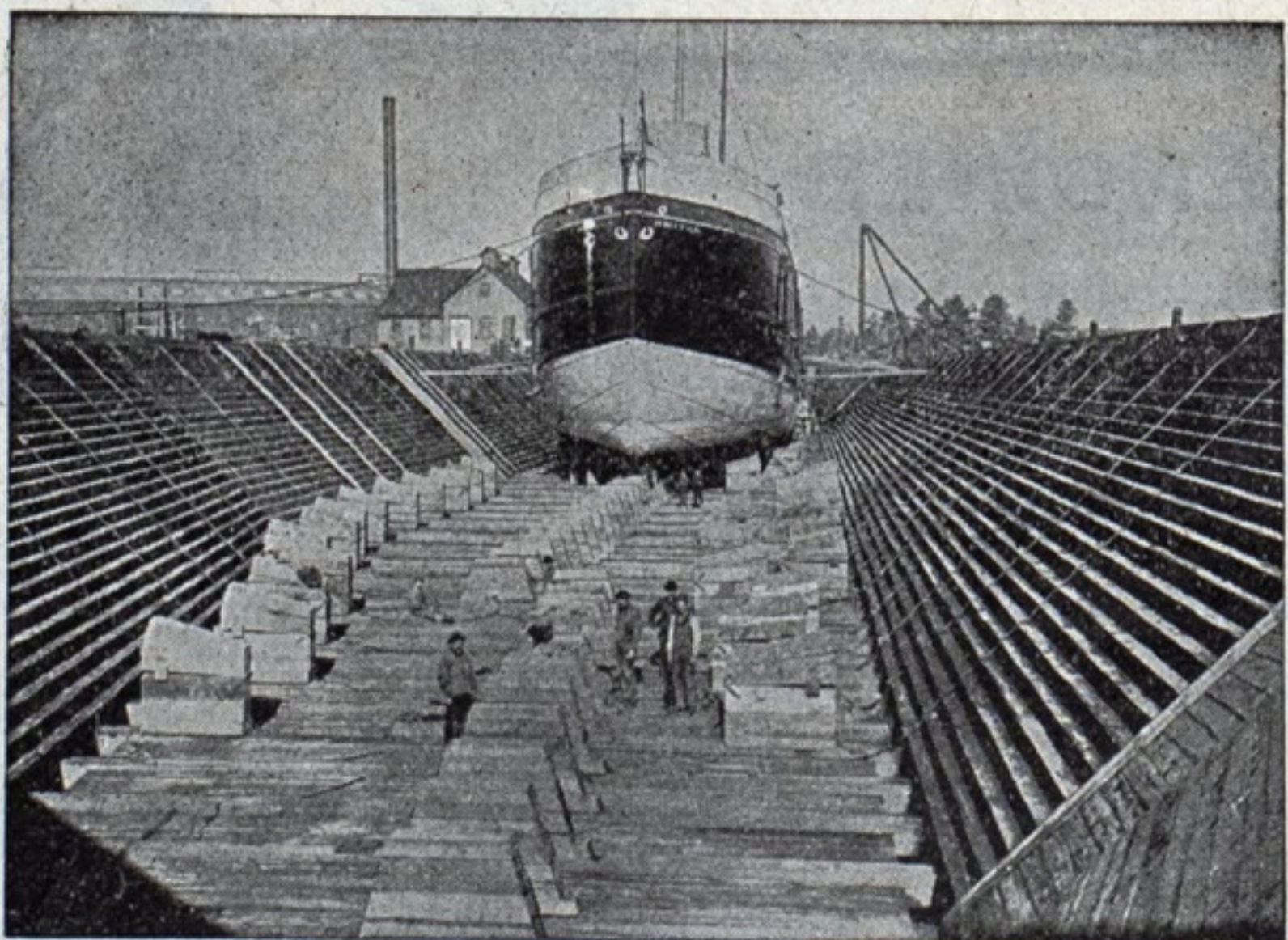
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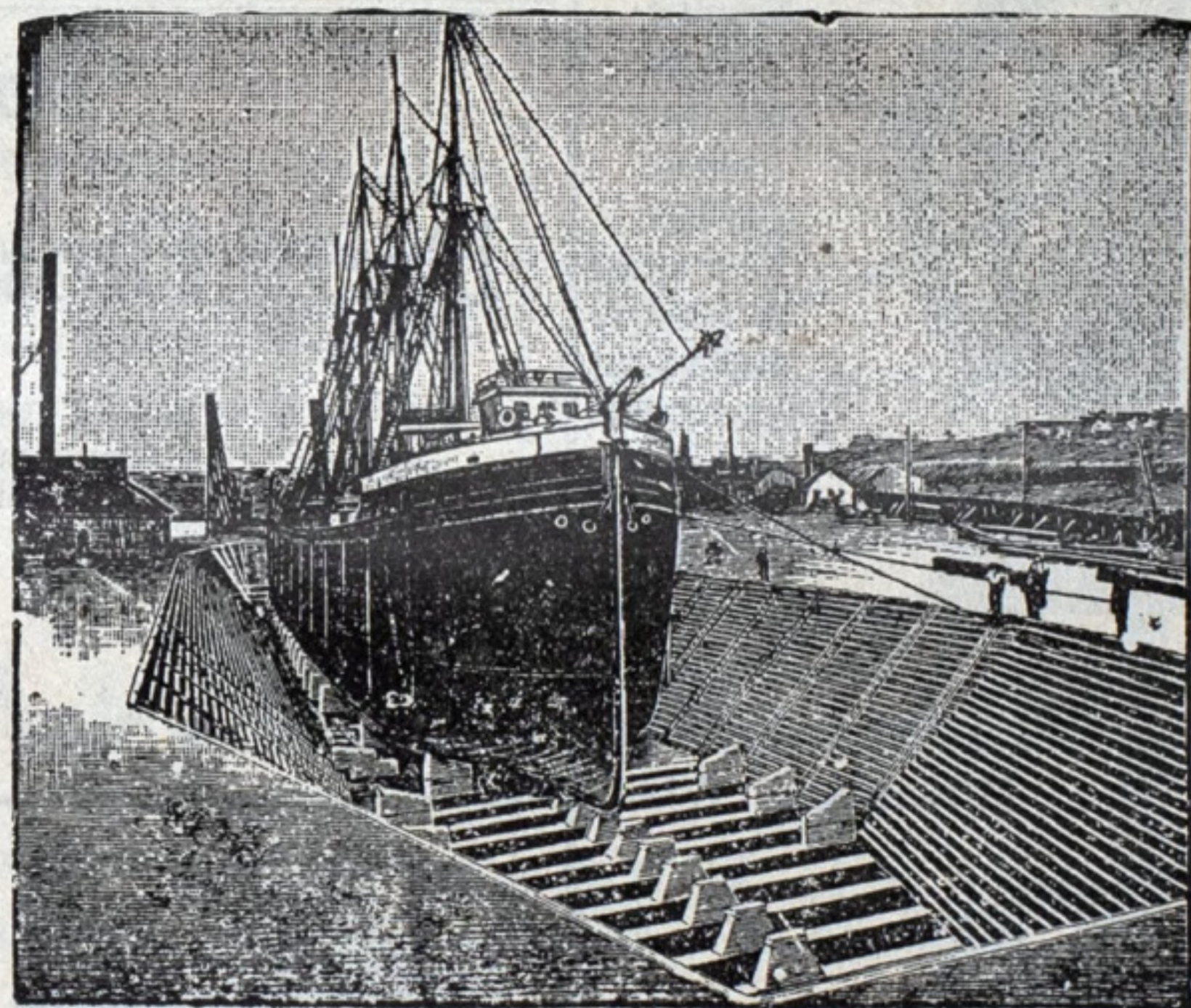
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